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page 107

The National Locksmith®

March 1998
Volume 69, No. 3

Stronger, Sleeker and Smaller...

TODAY'S ELECTRIC STRIKES

**ISC
WEST**

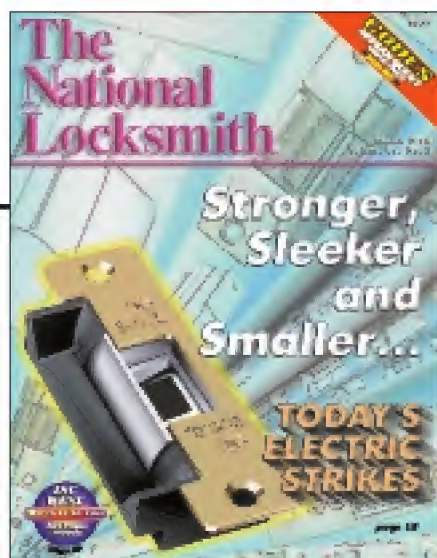
March 23-26, 1998

Las Vegas
Nevada

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On The Cover...



H.E.S. is just one of several companies that is greatly improving the adaptability, strength and versatility of the electric strikes they manufacture.

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**SecureX Americas And The
UL Test**
*It was show time. Just SecureX, the UL
testers, the TL15 and TL30 safes and all
the antacid SecureX could carry.*

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COMMENTARY



<http://www.TheNationalLocksmith.com>
User name: national User ID: G5fh84

"You're under arrest! For fifteen bucks you have the right to remain silent."

Well we always said that someday it would come down to this. Yes, while many city Police Departments have ceased doing car openings at all, the city of Clifton, New Jersey has ceased doing them as a public service. However, they haven't exactly stopped trying to open cars.

Nope, not at all.

They've simply decided to charge for running a city sponsored lockout service.

I talked to a Lt. Parrella of the Clifton P.D. and he confirmed for me a rumor which we'd heard. Yes, Clifton is now dispatching sworn Police Officers armed with Slim Jims to attempt to open locked cars for citizens.

The cost? Fifteen bucks'll get your car Slim Jimmed in Clifton. If it opens...great, you got a cheap deal. If the officer can't get in, apparently you don't have to pay, and they refer you to a real locksmith.

And if the officer should accidentally damage your vehicle? Well, Clifton's not worried about that. They had you sign a Hold Harmless Agreement beforehand.

Why did Clifton make this move?

"We used to do it for free and I guess it got to be too much," said Parrella.

Well, you know, I have mixed feelings about this whole matter. On the one hand, I figure if the police want to try and open cars as a public service, they've got the right. It's a stretch, but try and see it like rescuing kittens out of trees. Some departments just consider it good public relations.

Thousands of other departments have discontinued the practice after causing hundreds of dollars in damage, and becoming tired of these calls when they could be responding to emergency calls.

But charging a fee is really a new twist. At about this point I don't have mixed feelings: I think it stinks.

I have never heard of a police department charging anyone a fee to conduct a private business which is, moreover, clearly not part of their public trust. If they want to try to open cars for free as a public service, fine. Don't send me letters about that; I simply think they have the right though I don't agree with it.

But when it comes to charging a fee, I strongly feel that Clifton has stepped over the boundary of their public trust, and has decided to directly compete with the tax paying locksmiths in their own community.

Do the police in Clifton do emergency plumbing work for a fee? Do they make you hold them harmless for busting your pipes first? Do they deliver pizzas for tips while on patrol? Will they still rescue kittens, but charge a flat fee and make you sign a statement to not hold them responsible if they drop the kitty? Splat!

Cheap shots? Maybe. But I think that once a P.D. starts charging for services, non-law enforcement services at that, they violate the public trust. They are neither Protecting nor Serving. And that's the cheapest shot of all.

Marc Goldberg



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Write us at: NATLOCK@aol.com

Marc Goldberg
Publisher

March 1998 • 5

Mango's Message

It's official. As of January 1, 1998, if you are an Illinois resident operating as a locksmith, you are in violation of the law if you do not have a locksmith license. If this doesn't concern you, it should, because your state is probably not far behind. Illinois is one of several states which has enacted a law licensing locksmiths, and many others are looking at states like Illinois to model laws of their own. The bottom line is, just because you don't live in Illinois, doesn't mean this law doesn't — or won't — pertain to you. To get an idea of what the Illinois law specifies for a locksmith license, read the following.

Besides requiring a locksmith license, if you are a locksmith employee, you must either have a locksmith license or a Permanent Employee Registration Card (PERC). If you have employees you must also have a Locksmith Agency license. If you own more than one retail establishment, you must also have an Agency Branch Office Certificate. And, that's just the beginning.

To qualify for a locksmith license, you must first fill out an application, provide two 1" x 1" photographs of yourself taken within three months preceding application and have live scan (electronic) fingerprinting done for the State Police. Current cost for the live scan is \$50.00.

You must then pass an examination authorized by the Illinois Department of Professional Regulation in the theory and practice of the locksmith profession. Initially this test is being given by the state twice a year. Current examination fee is \$128.80.

The test given by the state is the Associated Locksmiths Of America (ALOA) Proficiency Registration Program (PRP) test. The mandatory section is 250 questions, Life Safety Codes is 25 questions and Basic Electricity is 25 questions, for a total of 300 questions in all. Passing score for the test is 70 or above. From what I understand, if you have already taken and passed ALOA's PRP mandatory section and the optional life safety codes and basic electricity, those scores can be transferred to the state and a retake of the test is not necessary.

Initial cost of an individual locksmith license is \$500.00 and is good until the year 1999, after which time it must be renewed every three years. Renewal cost is \$450.00.

If you are a locksmith business owner with employees, you must have all the above plus have a Locksmith Agency license. Cost for the Locksmith Agency license is an additional \$500.00. Renewal fee is \$450.00 every three years. You also need to submit proof of at least \$1 million of liability insurance.

All locksmith businesses with employees must have at least one licensed locksmith (either the owner or an employee) and all subsequent employees need to either be licensed or have a Permanent Employee Registration Card (PERC). A PERC is \$55.00 per employee with a renewal fee of \$45.00 every three years after 2000.

All PERC employees must submit an application, send a photograph and be live scan fingerprinted, attached with the corresponding cost of \$50.00 each. In addition, within 30 days of date of hire, each employee holding a PERC must receive 20 hours of basic training related to his or her employment. Training is certified by the employer and needs to include Public Safety Codes (NFPA 80 & NFPA 101); Life Safety Codes; Building Code and ADA Laws. The Licensee-in-charge is responsible for the documentation of the training and must keep a training log for each employee as well as a training manual of all training materials.

If you own more than one business location, you will also need an Agency Branch Office Certificate. Initial issuance of an Agency Branch Office Certificate is \$200.00. Renewal fee is \$200.00 every three years.

O.K., that about covers all the basic licensing parameters and fees.

**Continued on
page 8.**

Greg Mango

**Greg Mango
Editor**



**It's the
Law!**





Continued from page 6

The locksmith registration and record-keeping requirements are enforced by the Illinois Department of Professional Regulation which falls under the Private Detective, Private Alarm, Private Security, and Locksmith Act of 1993. Under the definitions put out by the Private Detective, Private Alarm, Private Security, and Locksmith Board (known in short as the "Board" which consists of 11 members, two of whom are locksmiths) the practice of locksmithing includes, but is not limited to, the servicing, installing, originating first keys, re-coding, manipulation, or bypassing of mechanical or electronic locking devices at premises, vehicles, safes, vaults, safe deposit boxes, or automatic teller machines. That's how it is worded.

Under the law, when opening a residence, commercial establishment, safe, vault, safe deposit box, automatic teller machine or automobile, you must get the street address where the work was performed, get the name, address, telephone number, date of birth, driver's license number or other identification and signature of the person requesting the work. You must also have your name, license number or PERC number on the work order form. Copies of each work order form must be kept for two years.

Your license number must also be printed on all forms of advertising, such as in the Yellow Pages, service vehicle if lettered, or any promotional material.

The Illinois locksmith license law would have never taken place if it wasn't for the support and help of a lobbyist. The proponents of this law — which consisted of members from the Northern Illinois Locksmiths Association (NILA); Greater Chicago Locksmiths Association (GCLA); Illinois Locksmith Association (ILA) and Illinois-Indiana Locksmith Association (ILLIANA) — hired a lobbyist who presented the locksmith law proposal to key Illinois state representatives.

Most lobbyists are hired on a contingency basis. In other words, now that there is an Illinois locksmith license law, to maintain and thwart outside intrusions or violations, a lobbyist must maintain records and keep abreast of the ebb and flow of future laws that may impact or violate the locksmith licensing law. Plus, if any changes or alterations to the current locksmith law are needed or desired, a lobbyist is necessary to implement such occurrences. All this attention to detail comes at a price. The current lobbyist retainer fee is \$12,000 a year which is reasonable considering lobbyist fees can easily exceed double that.

Now one must ask, where does the money come from to pay for the lobbyist? Well, as of now, Illinois locksmiths do not have to sell cookies, raffle tickets or hold Bingo at the local association meeting place to raise the money. At present, a portion of the local locksmith association dues, association raffles, as well as a portion of the proceeds from the Midwest Trade Show, will all be earmarked for lobbyist fees funneled through the Allied Locksmiths of Illinois, developed for such contributions and fund raisers.

Obviously, the initial question that must be asked when discussing the Illinois locksmith license law is: what will be the benefits to the locksmith?


To answer that question, we must first examine why the law was proposed in the first place. The Illinois locksmith law was initially proposed, and eventually introduced into law, as a defensive measure. Aspects of the locksmith trade were under siege by the National Burglar & Fire Alarm Association (NBFA). The NBFA, along with a powerful team of lobbyists, was proposing to pass legislation that would essentially prohibit locksmiths from installing or servicing any electronic alarm enunciating product or locking device, such as a Detex, Alarm Lock, etc., on any building with an existing alarm system.

In an effort to prevent such legislation from passage and the aggressive posturing on behalf of the NBFA, several members of Illinois locksmith associations decided to initiate a locksmith license that would negate any legislative limitations upon the trade, which at present it does.

What other benefits this law will bestow is unknown at this time. Only time will tell what the future holds, but at least there is a foundation upon which to build. Prior to this, locksmiths in Illinois were considered a non-entity in the eyes of the state. Now with a license to support their position, their fate and destiny can no longer be manipulated or infringed upon by others.

There are many who are pleased, and many who are unhappy about this new law. If you're not, there is little you can do. I have received numerous complaints regarding this issue and still do. I must tell you that it is too late to complain. It is the law. Now that it has passed and is being enforced, complaining does little good. What I would encourage Illinois locksmiths to do is start going to the Greater Chicago Locksmith Association (GCLA) 773-622-0944; Illinois Locksmith Association (ILA) 217-824-8696; Northern Illinois Locksmiths Association (NILA) 847-949-0603; and or Illinois-Indiana Locksmith Association (IILA) 708-812-4452 meetings. Find out for yourself what is going on and why. Get involved so that when changes start occurring you have a voice.

As for those outside Illinois, pay special attention to what is going on in Illinois, because odds are, a similar law will be passed where you are now. I can assure you, there are members within your locksmith association that are working (or considering) a similar locksmith proposal that will affect your livelihood, and it can either be for your benefit, or your detriment. I'm not saying a locksmith licensing law is a good thing or a bad thing, it's just better to be aware and have a hand in designing or negating a law with which you may, or may not, have to live with.

For more information on the Illinois locksmith license law or to register, contact the Illinois Department of Professional Regulations at: (217) 785-0800. 

March 1998

Letters

The National Locksmith is interested in your view. We do reserve the right to edit for clarity and length.

Get Real

This letter is in response to Paul — who wrote in the January issue — saying he is as snug as a bug in a rug with AAA, and that we should all just shut up and deal with it. He so wisely pointed out that the motor clubs read trade magazines and if we complain too much, they will just send all of their work to tow companies. What fantasy world are you living in?

Sure tow companies can open some cars, but not all of them. Plus in our area, the response time for most tow companies is twice that of our own. Also, I do not know of any tow companies who cut key's by code.

I don't know what rate you normally receive, or what you receive from AAA, but what we are paid from AAA is not even close to the rates of our county. Our normal rate is \$55.00. AAA wants to give us \$20 per call and \$40 for RNC calls with an additional \$10 in the middle of the night. A discount for volume is

fine, but, \$20 does not even cover my overhead.

If the motor clubs read these letters, good, let them send their business to tow companies, who don't know what they are doing. Let their customers call them screaming about bad service and see how long it will take AAA, and who ever else, to reconsider paying a locksmith what they are worth.

As for the comment about cleaning out our trucks and our appearances, how conceited can you get, you egotistical ape? Just how many locksmiths have you met that you can say you are better looking than? I don't remember seeing you on the cover of GQ or any other magazine!

You said that you don't need our help, yes you do. If we all spoke out with one voice we could collectively bargain with the motor clubs into giving us better rates, instead of taking the scraps they throw us. You think you are getting the best rate you can, but in reality, they can, and will, pay us more if we play our cards right.

*Richard Holliday
Illinois*

\$15.00 Car Openings by Who?

It has come to our attention that a neighboring town, Clifton, New Jersey - about 90,000 population and with a police force of about 130 - has started to charge for opening locked cars. The fee is \$15.00 and does not have to be paid at the time of opening. You will be assessed \$15.00. What that means is that you will receive a bill from the City of Clifton for \$15.00 for services rendered. You will receive this bill whether the



officer succeeds in opening the locked door or not. If you do not pay the bill, you will be held in contempt and run the risk of being arrested.

It has long been my feeling that if a person locks the keys to his/her car inside the vehicle, he/she should have to pay. Period. No freebies. The way it is now, the majority of people who lock their car keys inside the car expect free service for their stupidity.

*Bill Paroby
New Jersey*

Correction

In the December 1997 edition of *The National Locksmith*, Federal Lock mistakenly used the slogan "THE LOCKSMITH'S LOCK" which is a registered trademark owned by Junkunc Bros. American Lock Company. Federal Lock Company regrets any confusion that may have occurred as a result of this error.

The National Locksmith
1533 Burgundy Parkway
Streamwood, IL 60107
Attn: Editor

Continued from page 10

Working Cheaper Won't Cut It

This is in response to Mr. Keen's letter in the January issue of *The National Locksmith*, (In Defense of Roadside Assistance Clubs). I don't know about you Mr. Keen, but as a locksmith and small business owner for almost ten years, I do not intend to work cheaper each year as operating costs go up. As a former contractor for several of these clubs, I did not see any significant financial gain on my part by remaining a service provider for those clubs. Do you think that the top executives of those clubs are willing to take personal pay cuts because of competitive price wars among the automobile clubs? I think not. If anything, credit should be given to the dispatchers of these clubs who do a fine job while having to deal with a rude, impatient, demanding bunch of card carrying members whose impatience probably got them into a bind to start with.

There are many other parts of this fine trade that a locksmith can focus on. Masterkeying, commercial work, and high security allow the locksmith to actually realize a financial gain while leaving the hacks who call themselves locksmiths and towers to fight it out. Towers need to make a living too, but I personally do not remain in business for the sole purpose of opening cars. Anyone in business who is willing to work cheaper every year might as well get a job. There is no overhead in flipping burgers or working at a car wash.

*Ken Buck
New Hampshire*

Bill Collector

If you have problems getting paid, change the wording on your invoice. Have it read to the effect that any unpaid invoices, etc., can and will have all collection fees added to the outstanding invoice, including any necessary legal fees. Talk to a lawyer in your state to make sure that the wording is correct.

This is what I have on the bottom of my statements:

I hereby certify that I have the authority to order the lock, key or security work designated above. Further I agree to absolve the locksmith who bears this authorization from any and all claims arising from the performance of such work. I also agree to, that if

payment is not made immediately, to pay for the above designated parts and/or labor in the time specified above. If I fail to do so, any expense incurred in collecting this debt, whether from but not limited to a collection agency, or court or other methods, will be my responsibility to pay in addition to the original bill. A service charge will be added if payment is not made within 30 days.

I had a customer balk at paying the agreed upon amount after I did a job for him. I said no problem. I called a collection agency and they wanted 40% of the bill for collecting. That seemed high, until I found out that the collection agency added 40% to the bill. In my state, a mechanics lien is not difficult to file either.

The customer had already signed the invoice and I read the wording on the invoice to him and explained that his car would get a mechanics lien filed on it, along with all associated and finance charges.

He paid. *John Shivanow
E-Mail*

Quit Gripping

Whenever I attend an ALOA show I always hear the same gripe about police and tow truck drivers opening cars. Personally I give them my blessing. In fact I do not care if they have all the same tools that I use.

If those of you who are griping would contact your local car rental agencies and let them know who you are, I am sure you will feel the same.

I do not work on cars any longer because of my age (71) and health, but I did have thirteen local offices of a very large car rental agency as my personal accounts. About 80 percent of the cars I worked on were the result of a non-locksmith disconnecting the linkage inside doors. I even remember a couple of cars in which all of the doors were disconnected. Some of these problems were caused by the agency employees themselves!

My business is a one-man shop. I do not advertise my business and my telephone is unlisted. When I started in business, it was only part time and I could not afford to advertise, but as it grew I found that I had to get an unlisted phone or I would have to hire another locksmith. As it was I was working sixteen hours a day to keep up. My theory is a pleasant

attitude and quick response time creates a lot of business.

If any of you see me at the conventions and want to talk about this or just shoot the breeze, you can find me in my favorite RED jumpsuit. In parting, I would like to comment about Bill Reed. This man should be given some sort of recognition by the industry as a whole. His contribution to the trade is really something else!

*Fred Lammers
California*

Furniture Connection

Having been working in the commercial furniture industry for 15 years, I have had the opportunity to make thousands of furniture repairs, among them lock repairs. Most of my clients are corporate businesses, which when they have a problem call their furniture dealer who contact me to do the service work. There are, however, companies that will call a local locksmith when they are locked out of a file cabinet or a desk.

One thing I have noticed is that the locksmith will get them into their furniture, but not be able to complete the repair. This is due to the fact that although most of the locks that are used in this furniture are supplied by lock manufacturers, many times the linkage systems such as actuators lock rods, bars, tabs, etc., are designed by the manufacturer themselves.

Almost none of the major manufacturers will sell anything to anybody except a dealer.

*Mike Murphy
Illinois*

Who's Selling Who

I have a question about some of the vendors that sell lockout tools and how they choose who to sell lockout tools to. I was out one day when someone asked me to unlock their car. As I approached the car another man arrived to open the car. He was in possession of almost the same tools as what we had, but had no locksmith ID of any kind. When we asked him about it he said that he does not even claim to be a locksmith. What makes him any different from a common thief or any person on the street? Can just anyone buy tools and open cars without being a locksmith?

*Bill Short
North Carolina*



Security Café

**DROP IN FOR
TOOLS, TECHNOLOGY
& EQUIPMENT**

Precision Hardware Exit Device

Precision Hardware, Inc., introduces a Vandal Resistant Exit Device Trim for abusive applications. When locked,



shock absorbing "overload" springs generate resistance to excessive torque and in turn cushions the lever handle when it receives severe blows.

Heavy-duty investment cast stainless steel internal components prevent the need for break-away or free spinning mechanisms. Thus, the handle always returns to the "home position" eliminating the need to manually reset the lever.

Lockmasters® New Style GSA Safe Saver® Pin

The new style GSA Safe Saver Pin was designed and developed specifically for both Red and Black Label GSA equipment. Since a hole no larger than 1/4" can be used when opening and repairing this equipment, Lockmasters' GSA Safe Saver Pins are only available in 1/4". As with our regular Safe Saver Pins, drilling a properly installed GSA Safe Saver Pin will be much more difficult to drill than any of the hardplate currently available. These GSA Safe Saver Pins have been approved for use in the repair of both Red and Black Label containers.

Trimec Offers ES100 Burglar Resistant Strike

Trimec announces the introduction of the innovative ES100 burglar resistant electric strike. Having a deeper than normal throat, this electric strike will operate with a greater



range of locks, and offers the same level of security usually provided by more expensive electric

locking systems. It features the following: Power to open/power to lock, field reversible in less than 45 seconds. UL approved to standard UL 1034 to the highest level. Solid cast aluminum construction with stainless steel striker for greater strength (3000lb/ holding force).

R.Q. Flexible Fiberscopes



R.Q. Associates distributor for ITC offers a line of articulating 2-way 4mm and 6mm, and 4-way 8mm and 10mm flexible fiberscopes which exceed the requirements of professionals who rely on the highest quality for visual inspections.

By incorporating the latest in lensing and imaging fiberoptic bundles, ITC offers the finest fiberscopes on the market at affordable prices.

LOCINOX Introduces New Fence Lock

LOCINOX rustproof security is introducing a new concept in lock technology to the fence industry. LOCINOX is a heavy duty spring latch/dead bolt lock that fits new and existing square or round fence post applications in the field without



welding. This patented lock is constructed of only non-ferrous metals, making the lock rustproof. It is secured with

tamper resistant stainless steel bolts. The lock is designed to be field adjustable for mounting to variable size fence posts. This lock can be keyed differently or keyed alike in groups. It is available in clear aluminum or powder coated in black, white or green.

Harrison Electronics Hellfire

The Hellfire 401B remote alarm comes equipped with Rolling Code transmission protection which changes the transmitter code each time the alarm is armed or disarmed making it virtually impossible for a thief to "grab"



the code and disarm the alarm.

Another Super Security feature of the Hellfire 401B is Transmitter Programming Lock Out (TPLO) which allows you to program the number of transmitters you want to operate the alarm, then LOCK OUT unauthorized programming of any additional transmitters.

Chicago Lock Introduces "KeyLOC"



Chicago Lock Company has introduced a new tamper-evident key ring for the purpose of "protecting important keys." Called "KeyLOC," it is a unique, new security system that assures accountability for keys. KeyLOC fits a flexible vinyl-coated steel cable into a patented ACEII™ Cylinder, nested in a light weight housing. It practically eliminates the loss of keys or the duplication of keys by an unauthorized person.

KeyLOC holds from 10 to 50 keys and opens only to an

M.A.G. Security Starter Pack

As a first step to stopping home invasions, M.A.G. Security has developed an all-in-one, imaginatively packaged starter kit. The new Home Security Value Pack contains eight popular items related to doors, door jams, windows and patio doors to help create a strong barrier to intruders.

The convenient, easy-to-carry package with handle includes a High-Security Box Strike, Door Chain Guard, Adjustable Strike, Door Viewer, Door Edge Guard, Sash and Sliding Window Locks, and Sliding Patio Door Locking Pin. The pieces are attractively displayed in see-through blisters.



Continued from page 14

SECURITY CAFE

authorized key. The vinyl-clad steel cable is the same type used in the aircraft industry and resists cutting.

ABUS Monobloc™



ABUS Lock Company introduces the new Monobloc series of brass body padlocks that feature a unique design for special applications.

The precision crafted solid brass padlocks feature 5 pin tumbler paracentric keyways that are specially designed from anti-corrosive materials. Thousands of key differs are available. Keyed alike versions are also available.

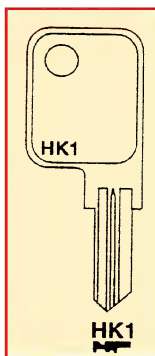
The #82/63 (2 1/2") model sports a 3/8" case hardening spring loaded shackle that is triple chrome plated.

The #82/70 (2 3/4") and #82/90 (3 5/8") model sport a 1/2" case hardening spring loaded shackle that is triple chrome plated.

Jet Haworth Blanks

Key blanks to fit the Haworth locks are now available from Jet Hardware in the United States and Canada. Jet is producing the four basic keys and the stock numbers consist of HK1 through HK4. Haworth cabinet and utility locks are found for the most part on office furniture.

The keys can be easily identified because they share the same bow design as the old "E" bow that Yale produced when they were affiliated with the Eaton Corporation.



S. Parker Interchangeable Core

S. Parker markets a line of six and seven pin interchangeable cores and peripherals that match the leading competitor's offerings in quality and ease of installation but cost about 25 percent less.

In addition to more than 30 varieties of interchangeable cores, S. Parker also markets Grade 1 and 2 interchangeable core lever handles, available in different functions. The company also offers a selection of interchangeable core mortise housing, rim housing, padlocks, drawer and cabinet cylinder cores and other door hardware products.

All-Lock Announces New Key Blanks

All-Lock has announced the release of the following General Motors, Saturn and Ford key blanks.

KB6896-

Using GM's Master 88 groove, this key literally supersedes all 1997 and up GM and Saturn Corporate Head key blanks. Used on the 1997-98 Saturn, Oldsmobile Cutlass, Intrigue, and Chevrolet Malibu.

KB6471- For the original look 1997-98 Chevrolet Malibu GM Corporate Head key. Plastic head with 75 groove.

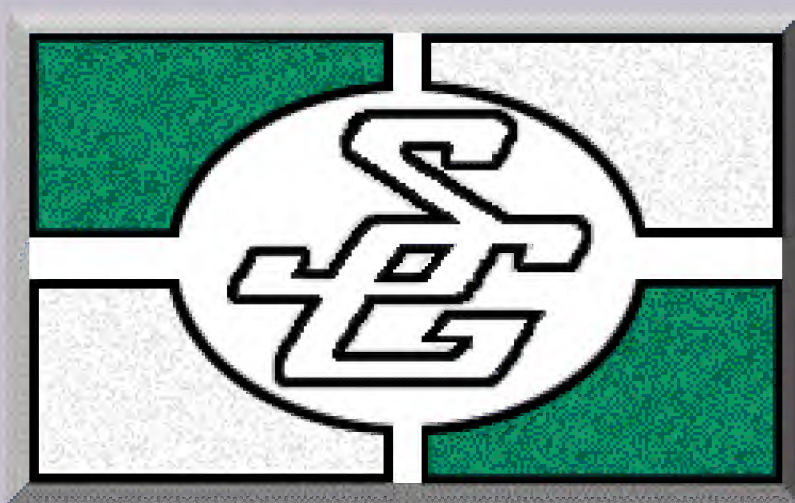
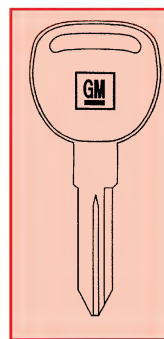
KB6473- For the original look 1997-98 Saturn. Plastic head with 75 groove.

KB6474- For 1996-98 Ford PATS vehicles with 8 cut system

KB6475- For the original look 1996-98 Ford 8 cut vehicle.

All keys are made of quality, nickel plated brass, and plastic molded heads (where applicable).

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**COVER
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H.E.S. 5000

Series Strikes



by
Steve Gebbia

The past few years have seen the introduction of several new electric strikes. Each has been touted as the solution to your most difficult strike installations. Only a few of these have lived up to expectations. Even these haven't solved the two biggest strike application headaches: Mortar Boxes and Stopless Aluminum Frames.

Hanchett Entry Systems (H.E.S.) has a new strike that addresses these very concerns. With the addition of the 5000 series strikes (see *Photograph 1*), H.E.S. now has a strike for every application. This strike is designed to fit any of the common mortise frame preps for electric strikes.

Like the 1000 and 7000 series strikes, the 5000 is sold as a "universal" body with various "option kits." The option kits are simply the various faceplates that H.E.S. makes available. Four different faceplate lengths are available: 4-7/8", 6-7/8", 7-15/16", and 10".

ALUMINUM, ALUMINUM

Probably the most useful option is the set of lip extenders for aluminum frames (see *Photograph 2*). These are used on aluminum door frames that don't have door stops on the vertical portion of the frame. Four different extenders are available ranging from 1/2" to 3" wide. By combining various sizes, you should be able to come up with an extender for almost any reveal required.

The most common application occurs when replacing an Adams-Rite M S style deadbolt with a deadlatch. The strike

1. With the addition of the 5000 series strikes, H.E.S. now has a strike for every application. This strike is designed to fit any of the common mortise frame preps for electric strikes.





2. Probably the most useful option is the set of lip extenders for aluminum frames. These are used on aluminum door frames that don't have door stops on the vertical portion of the frame.



3. The process of installing a lip extender on the 5000. Simply mate the hollow pin on the extender to the opening on the strike - and push, hard.

must be located in the middle of the frame, which is totally flat. In the past, the only way to use an electric strike on these frames was to use a rim-style mount (such as the 7000 series with 783 option). Now, with the lip extenders, you can provide a secure strike installation that looks factory fresh.

Yes, other manufacturers do make lip extenders, however, the H.E.S. extenders are the easiest to install and absolutely cannot be removed without removing the strike from the frame. Even then it's not very easy.

Photograph 3, show the process of installing a lip extender on the 5000. Simply mate the hollow pin on the extender to the opening on the strike - and push, hard. To prevent the extension from loosening up, the hole on the strike is tapered - forcing the roll pin to compress as it is installed (see *Photograph 4*).

The lip extender can be loosened and removed by carefully prying it apart from behind, but you won't be able to pull it apart with your hands. This design also brings an added benefit. Since the roll pins are located behind the extension, the mounting hole is never visible after installation.

WHAT FOOL PUT THIS DARN BOX IN THE FRAME?

Yup, if you install electric strikes in steel frames, you've probably muttered those very words yourself. (Or something similar!). The fact is, mortar boxes can be a real pain. Other manufacturers have brought out strikes that supposedly would fit inside the box. But the installers know better - there just isn't any such thing. Not until now, that is!

The H.E.S. 5000 series strike will fit inside standard steel frame mortar boxes. Well... almost. The strike itself fits the box easily. The internal mechanism is radically different from other strikes, allowing a working depth of 1-1/16". This allows the strike to nestle very easily inside the mortar box (see *Photograph 5*).



4. To prevent the extension from loosening up, the hole on the strike is tapered - forcing the roll pin to compress as it is installed. The lip extender can be loosened and removed by carefully prying it apart from behind,

So where's the problem? The connector. Like all the strikes from H.E.S., it has a plastic plug-in connector attached. Unfortunately, there just isn't enough room in the box for the strike and the connector. There are a couple of different ways to get around this. The method you choose will be determined by the type of steel frame and mortar box you are dealing with.

Steel frame installations vary according to the particular application. Exterior door frames on masonry (brick, block, or stone) buildings will be mortar filled. Exterior frames on pre-fab steel buildings and steel frames in interior partition walls are generally not mortar filled. You may find the occasional exception to this, but for the most part, this will hold true.

Mortar boxes can vary from frame to frame as well. There are a couple of common styles, but there is no rule as to where you might find which style. The main difference between these is how they are attached. There are three basic styles. The first is the "knock-away" box. This is the type you want to see on every installation - but rarely do. To remove this box, just smack it firmly with a hammer and cold chisel. The box will break away from the frame leaving the mounting tabs intact. Don't count on seeing this one very often.



5. The H.E.S. 5000 series strike will fit inside standard steel frame mortar boxes. The internal mechanism is radically different from other strikes, allowing a working depth of 1-1/16". This allows the strike to nestle very easily inside the mortar box

The next style is fairly common on non-mortar filled frames. This style is attached to the frame at its top and bottom. The sides of this type of box are not usually welded closed. The mounting tabs are an integral part of this mortar box. Don't remove the entire box or you'll lose your mounting tabs.

The last style is the nastiest. This box is welded closed on all sides. It's often found in exterior, mortar-filled frames.

INSTALLING THE 5000 IN A STEEL FRAME

Steel frames are actually pretty fun to work with. Much nicer than aluminum frames. Think about it - you already have the major opening cut for you and the mounting tabs are located and installed. When dealing with an installation in an ANSI prep (4-7/8") you need only to remove the material for the return (reveal) portion of the strike.

Installation Tip: The key to making a clean, straight cut is to accurately mark your opening and then cut just inside the lines. Sounds simple, right? Sure, but pencil isn't very easy to see on a dark door frame, especially while cutting the opening with an abrasive wheel (see Photograph 6).

There are a couple of ways to make your job easier, and your lines easier to read. Put a couple of strips of masking tape on the area you are about to cut, then mark your opening on the tape. The light color of the tape makes the

Continued on page 22

Continued from page 20



6. The key to making a clean, straight cut is to accurately marking your opening and then cutting just inside the lines, but pencil isn't very easy to see on a dark door frame.

pencil lines much easier to read. But be careful, more than one locksmith has found themselves removing some paint along with the tape. To prevent this, don't use the tape at all. Locate the corners of the opening and drill a 5/64" hole just inside each corner (see Photograph 7). Keep the hole small - the bigger the hole, the more hand filing you'll have to do. These holes will also help you locate the corners while cutting so you don't accidentally over-cut the opening. The holes will be clearly visible even while cutting. Just cut from one hole to the other and you're done (see Photograph 8).

Now that you've got your opening cut, take a good look at that mortar box. Look particularly at the side closest to the door stop. The frame in Photograph 8, is the second variety listed above - secured top and bottom, but not at the sides. In some cases, you can simply bend the stop side of the box inward - you only need about 3/4" or so. This will give you space to feed the plug-in connector into the frame. You can also bring your wires into the mortar box at this point.

In photo 8, the connector is shown at the latch edge of the opening - we were attempting to see if the connector would fit inside the box with the strike, so the wire was fed down along this edge of the box. After trying several positions - alongside, behind, even above the strike - we determined that the



7. Locate the corners of the opening and drill a 5/64" hole just inside each corner. Keep the hole small - the bigger the hole, the more hand filing you'll have to do

connector just wouldn't fit inside the box. The best bet would be to bring the wire down along the stop side of the box, and feeding the connector into the frame at this point.

If you have a mortar box that is welded on all sides, or that just won't bend, you will need to cut an opening in the box for the connector and the wires to pass through. Locate this hole either in the stop side of the box or as close to that side as possible (there's greater clearance behind the box at this point).

You do have one other option - remove the plastic connector from the wires! Now all you need is a hole large enough to pull your wires into the box.

FEATURES OF THE 5000 SERIES STRIKES

The 5000 series strike is both AC and DC compatible straight out of the box. A bridge rectifier is not required.

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8. These holes will also help you locate the corners while cutting so you don't accidentally over-cut the opening. The holes will be clearly visible even while cutting.

Using one, however, will provide you with an audible indicator - the familiar "buzz" of the AC strike. Of course, H.E.S.'s electronic accessories for the 1000 and 7000 series strikes - including the SmartPac line controller - are fully compatible with its newest addition (see Photograph 9).

In order to reduce the depth of the strike, the centerline of the internal pivot points have been moved closer together. The result of this and other internal changes is an extremely strong electric strike. During pull tests, the 5000 series strike withstood more than 2300 pounds force on the keeper before failure. If you can call it failure.

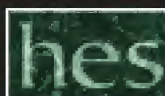
With over 2300 pounds of pulling force on the keeper it still held solid, but the holding fixture did not! More amazing than that, that same electric strike was then installed in a door frame at H.E.S. and is working flawlessly today! This strike is actually stronger than most of the door frames it will be installed in!



9. The completed installation of the H.E.S. 5000 electric strike.

As of the time of this article, you must specify either fail-safe or fail-secure when ordering your strike. However, the folks at the factory are making revisions that will allow it to be converted in the field. Look for this change sometime mid-year 1998.

The one drawback this strike has is that it cannot accept latchbolts longer than 1/2". This is the trade-off for getting a strike that'll fit inside the mortar box. Sure, if there is a really big gap between door and frame, you might get by with a 5/8" latch. But, if there was a gap that big (1/8" or more at the latch edge), would you really want to install an electric strike on that door? Besides, for those applications with longer latches, you should really use the 7000 series strikes. Yes, it's deeper and won't fit in the mortar box, but it is a very heavy duty strike and will release even under considerable amounts of pre-load.



THE KICKER

Once again H.E.S. has come up with a winner. When you combine ease of installation, sheer brute strength, variety of options and faceplates with the reputation of one of the leading manufacturers of high quality electric strikes, you can't miss. But then, to take it one step further - as H.E.S. did - and give it a suggested list price of under \$100.00, well, how can you go wrong?

Use one on your next installation and you'll make it your first choice. I know I will.

For more information, contact H.E.S. at: 800-626-7590.

Additional Electric Strike manufacturers are:

Adams Rite Mfg. Co.
4040 South Capitol Ave.
City Of Industry, CA 91749
562-699-0511
Fax: 562-699-5094

Folger Adam Security Incorporated
16300 W. 103rd St.
Lemont, IL 60439
630-739-3900
Fax: 630-739-6138

Rofu International
2004-B 48th Ave. Ct. E
Tacoma, WA 98424
253-922-1828
Fax: 253-922-1728

Trine Products
1430 Ferris Place
Bronx, NY 10461
718-829-4796
Fax: 718-792-9127

Rutherford Controls Ltd.
2697 Int'l. Pkwy. Bldg. 5 Ste. 122
Virginia Beach, VA 23452
757-427-1230
Fax: 757-427-9549

Trimec
132 W. Maple Street
Grafton, WI 53024
414-375-8330
Fax: 414-375-6712

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Quick Entry

UPDATE

by
Steve
Young



1997 Saturn Coupe (SC-1)

Like all Saturns, the 1997 Saturn Coupe features an outer body skin made of "Space Age Polymers" (see *Photograph 1*). For those of us, who speak English, that means that the body panels are made of plastic. In order to service any of the components inside the door, the outer skin of the door must be removed instead of the inner door panel. This makes the Saturn an excellent car to illustrate the principles of car opening. You can see in the photographs exactly where the tool goes and exactly what happens, because you are seeing the car with the outer skin of the door removed.

To unlock the car, begin by wedging open the door cavity at the base of the window, directly above the outside handle (see *Photograph 2*). Insert an inspection light into the door cavity to locate the horizontal linkage rod. There are two linkage rods, but you will probably only be able to see one. Fortunately, the most visible rod is the inside lock control linkage, which is the linkage rod you need to attack.

If you can see two rods, attack the rod that is closest to the outside of the door with the short end of the TT-1003 tool. Otherwise attack the only visible rod. Place the hooked end of the tool over the linkage rod, twist the top of the tool to get a grip on the rod, then lever the rod forward to unlock the door (see *Photograph 3*).

If you cannot see the rod, or you do not have an adequate inspection light, you can also locate the linkage rod by feel. When working by feel, I recommend using the short end of the TT-1008 tool, which is the reverse of the TT-1003. When using the TT-1008



1. The 1997 Saturn Coupe.



2. Begin by wedging open the door cavity at the base of the window, directly above the outside handle.



3. Place the hooked end of the tool over the linkage rod, twist the top of the tool to get a grip on the rod, then lever the rod forward.

tool, lower the tool into the door until you feel it contact the horizontal brace inside the door. This will be about six inches below the outside door handle. Continue lowering the tool about one inch, then rotate the tip of the tool toward the inside of the car. When you pull upward on the tool it should hook onto the linkage rod almost immediately.

If the tool does not contact the linkage immediately, continue to "fish" with the tool until you do hook the linkage. You can verify that you are on the correct linkage by watching the inside lock control lever for movement as you move the tool. Once you are sure you have engaged the correct linkage rod, lever it forward to unlock the car. **TNL**



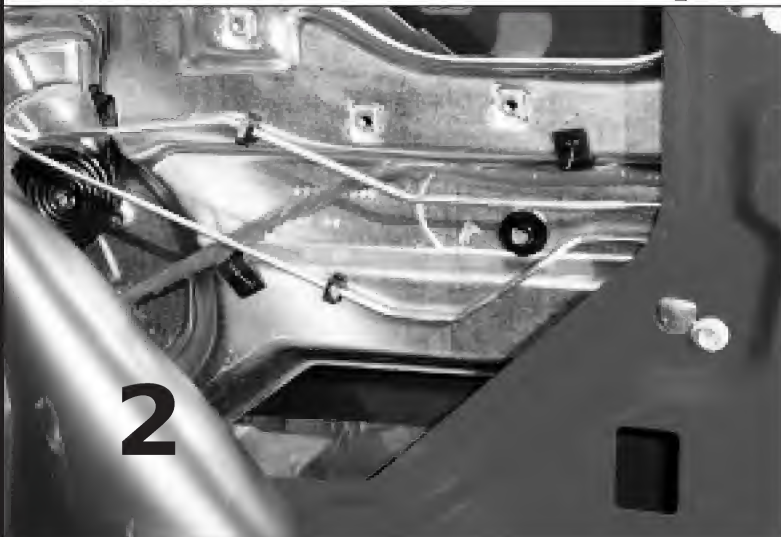
by
Michael Hyde

SERVICING THE 1997 BUICK PARK AVENUE PART 1



1 Here's a car with some new twists, the 1997 Buick Park Avenue. The 1997 Park Avenue has locks made by the big European lock manufacturer "HUF." The only part made by Strattec is the lock housing mounted on the column. This car is also equipped with a Transponder, but the good news is that the system is very similar to the Ford P.A.T.S. system. General Motors is calling this new transponder system "PASSKEY III."

OPENING TECHNIQUE



2 Opening this car is easier than it looks, even though the linkage rods are heavily guarded.



3 First spread the window and weather stripping. I used a horizontal slide linkage tool and inserted it into the door cavity about 2" from the window edge.



4 There is an opening on the linkage where it is not guarded. This opening is right before the linkage connects with the latch. I use the opening tool and bring it down along the edge of the door and under the latch. I then bumped it up against the latch and the lock button began to move a little. Bumping it a couple of more times and the door was unlocked. The circle in the photograph is the area where I engaged the linkage rod.

Continued on page 30

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IGNITION SERVICE

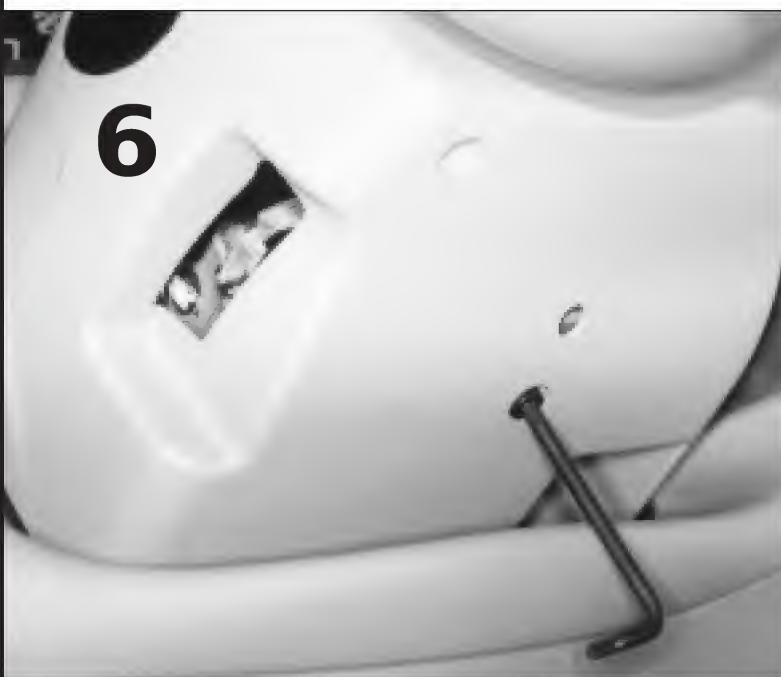
5



↑ This car uses a steering column lock that is usually found on G.M. trucks that use the new G.M. 10-cut keyway. This type of column is called the CSS column.

On the CSS columns there is no secondary lock cylinder housing. This means that the cylinder housing is an integral part of the steering column. The lock cylinder plug is inserted directly into that housing. When these columns are built, they are assembled with the shroud, ignition housing, steering wheel and so on. The ignition lock cylinder plug is inserted after the column arrives from the column manufacturer. Since the wings of the lock cylinder plug are larger than the opening in the shroud, you can not remove the upper section of the shroud.

6



↑ To service the ignition lock, you do not need to remove the steering wheel. Remove the two Torx screws that hold the bottom half of the shroud to the column.

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7



↑ Adjust the column to its mid-height position. Now remove the tilt-column lever. The lever pulls right out.

8



↑ The next step is to gently, and I mean gently, unsnap the forward section of the shroud. The rear section of the shroud is hinged and will not unsnap. The lower section of the shroud can be removed by pushing it towards the front of the car, to release it from the molded plastic hooks. You can also push the shroud out of your way. You can now see the Delco "PASS-Key III" transponder receiving unit.

IMPORTANT NOTE: The cylinder plug only releases when it is in the "Start" position. You can disconnect the battery to accomplish this. If you disconnect the battery you may need a special radio "Code" to reactivate the vehicles radio. You can put the car into gear, such as "Drive," and then turn the ignition to "Start" to depress the retainer. When the car is in gear, the transmission safety switch does not allow the starter to engage. Be careful. If you hear the starter engage, turn the ignition switch to the OFF position immediately.

9



Insert the working key and rotate the cylinder to the "ON" position. Put the car in "Drive," and make sure the brake is on. Use a GM 10-cut ignition release tool and rotate the plug to the "Start" position. Depress the retainer that is located on top of the housing. The cylinder plug will now slide out.

The ignition retainer tool that is pictured was part of a GM 10-cut servicing kit purchased from A-1 Security. A GM 10-cut ignition retainer tool can be purchased from Tech-Train Products as well.

10



The ignition housing is pictured. The drop-in hole for the retainer is shown with tool tip protruding through. The plastic buzzer switch is to the right of the tool.

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11

↑ With the cylinder removed the side-bar and active retainer can be seen.



12

↑ A close-up view of the code that is stamped on the cylinder plug can be seen on the side of the cylinder. The code looks as if it was put on in a dot-matrix design, and will interchange with the Strattec version. This plug contains nine tumblers in positions 1 through 9. This code series is different from the standard G.M. 10-Cut series.

PROGRAMMING INSTRUCTIONS FOR TRANSPONDER KEY

NOTE: This procedure is used when no other working key for the car is available.

1. Put the newly cut key into the keyway and turn it to the "ON" (RUN) position. A "Security" indicator light on the dashboard will flash for 10 minutes.
2. Within 3 minutes after the indicator light stops flashing, turn the ignition to "OFF," then return to the "ON" (RUN) position. The indicator light again will flash for 10 minutes.
3. Again, within 3 minutes after the indicator light stops flashing, turn the ignition to "OFF," then return to the "ON" (RUN) position. The indicator light again will flash for 10 minutes.

When the light stops flashing for the third time, the new key is programmed into the computer and will start the car. All previously stored codes will be erased. To stop the process at any time, simply remove the key and use an existing key to start the car.

CREATING A SPARE KEY

1. Place an already programmed key in the keyway. Cycle the ignition from "OFF" to "ON" (RUN) to "OFF."
2. Within 15 seconds, insert the new, properly cut Transponder key in the ignition. Turn the key to "ON" (RUN) or "START." The "Security" indicator light will go on and off. Turn the key "OFF." The key will now start the car.
3. Repeat the second step for each new key to be programmed.

DOOR LOCK SERVICING



13

↑ The door lock is part of the outside door handle.



14

↑ To service the door cylinder, it is necessary to remove the inside door panel.



15

↑ First, remove the trim plate in the bottom of the door pull cavity.

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16

↑ Under the trim plate are two screws that must be removed.

17

↑ On the rear edge of the door is a marker light. Gently pull out the light.

18

↑ Behind the marker light you will find a phillips head screw that must be removed.

19

↑ The trim cover that sits behind the inside door handle release must be removed. Gently detach it at the front section of it.

20

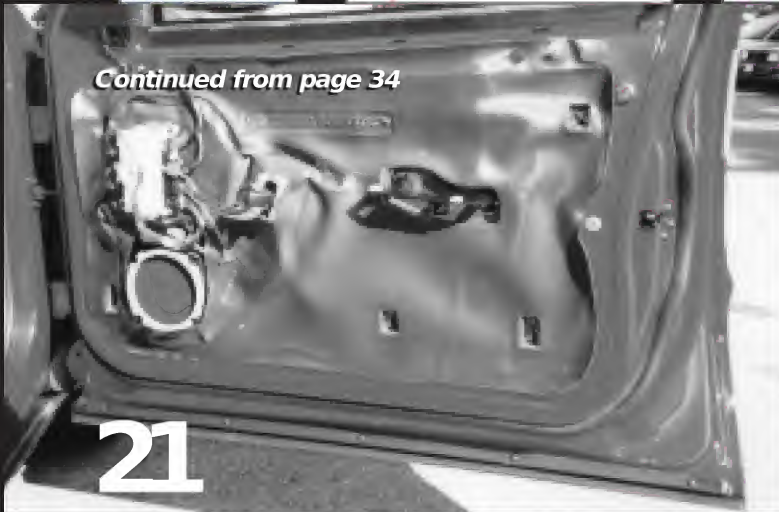
↑ The panel can now be removed. This door panel does not use the standard push in style fasteners. The panel uses the new "Hook" fasteners normally found on cars like Mercedes. Lift up on the panel to remove it. Be careful to remove the wiring harness attached to the panel.



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Continued on page 36



21

↑ A view of the door with the panel removed.



23

↑ Now you can pull back the thick liner and easily find the door lock cylinder. The lock cylinder is held in place by a wire clip. The door lock cylinders use plastic pawls. These pawls are very easy to break. Be extremely careful not break the pawl as you disconnect the linkage rod from it. There are no replacements available yet and a lock service package from the dealer is around \$60.00.



22

↑ To gain easier access to the inside cavity of the door, you must remove the bracket shown.



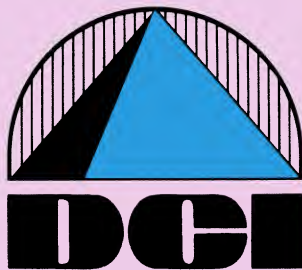
24

↑ There is no side-bar in the door locks. The door lock is pictured.



25

↑ The facecap is re-usable. The facecap and the tailpiece need to be removed to slide the cylinder plug out.



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26



A view of the plastic tailpiece. Be careful when removing not to break.



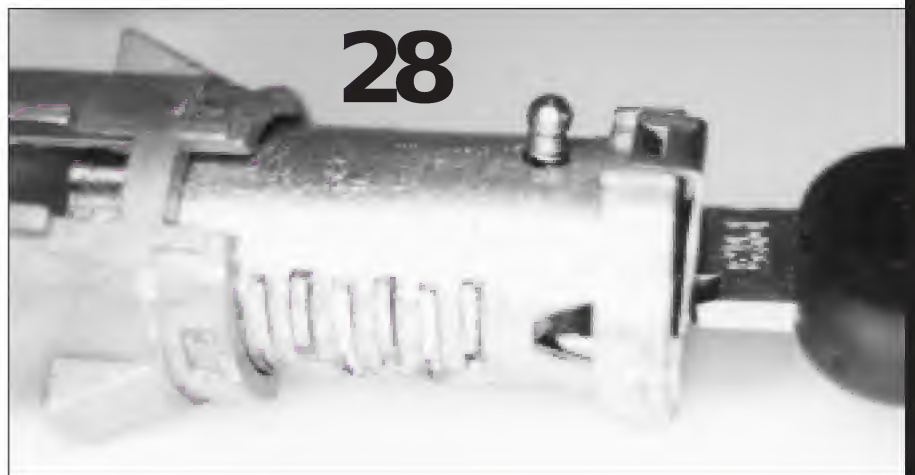
If you don't have a working key you will need to shim the cylinder plug in order to get the plug out. The plug has a ball bearing and spring mounted in it.



27



The shutter door assembly is different than other GM face caps. The shutter door springs are very small and can easily be lost.



28



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29

↑ A view of the door lock cylinder disassembled.

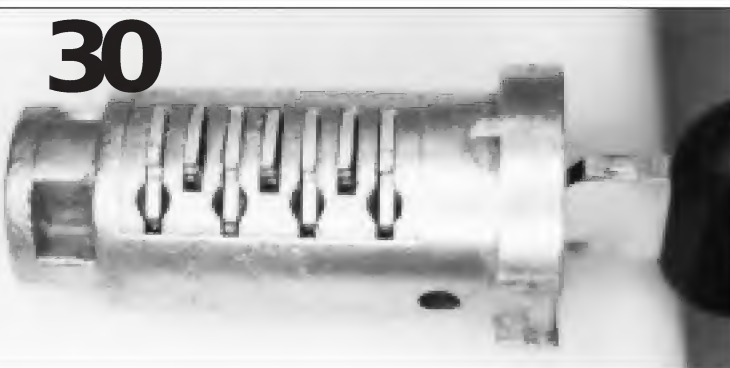


31

↑ The type of tumblers used in the door lock are very different than anything else in the GM family. The wide tumbler on the right is the standard GM 10-cut door tumbler. The tumbler on the left is from a 1992 Dodge Caravan. The tumbler in the middle is from the 1997 Buick Park Avenue. The Dodge tumblers are almost identical. This is really strange.

Next month we will conclude this feature on the 1997 Buick Park Avenue by covering the trunk lock and glove compartment lock as well as making first key procedures. See you then.

TNL



30

↑ The door lock contains tumblers in positions 3 through 9.



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**A Monthly Review of
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The National Locksmith's Guide to Transponders

The National Locksmith's®
Guide to
Transponders...
by Michael Hyde



For Professional Locksmith Use Only.

Transponder is a word that strikes fear in many locksmiths. The word transponder is short for: transmitter + responder. In basic terms, a transponder is a miniaturized electronic chip. There are two basic types of transponders. The first is the Electric Coupled Transponder. The second is the Magnetic Coupled Transponder. In most situations, to overcome the presence of a transponder, specialized equipment, key blanks, programming and procedures are necessary. The frightening part is that every car manufacturer's system is slightly different. Some are locksmith friendly, and some are not, but how do you know the difference. What equipment and knowledge do you need to service this equipment?

The National Locksmith's Guide to TRANSPONDERS by Michael Hyde, has the answers to just such questions and much, much more. Every vehicle that incorporates a transponder system is included in this book. Vehicles manufactured by: Acura, BMW, Buick, Cadillac, Chrysler, Ford, Honda, Infinity, Lexus, Mercedes and many more, are all right here. Never before has all this

information been available between the covers of one book.

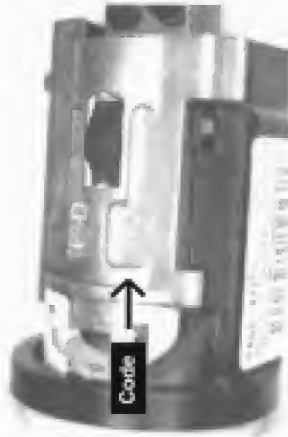
You get over 350 pages of information on how each system operates, keyblank illustrations, system components and locations and programming keys for every known situation such as when no other working keys are available. And that's just the beginning. Everything you wanted to know about a particular transponder system from any manufacturer is here.

Cars equipped with transponders are now flooding the market. Profit opportunities are enormous for those locksmiths who know how to work with them. The National's Locksmith's Guide to TRANSPONDERS by Michael Hyde will guide you every step of the way. In today's rapidly changing automotive market you only have two choices, either stay ahead, or fall behind. Way behind.

The price for The National Locksmith's Guide to TRANSPONDERS by Michael Hyde is \$124.95 plus \$5.00 for shipping and handling. Order through: The National Locksmith • 1533 Burgundy Parkway • Streamwood, IL 60107 • Phone: (630) 837-2044 • Fax: (630) 837-1210.

GENERAL INFORMATION

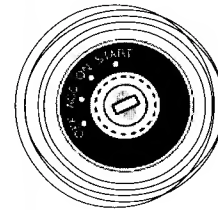
- ♦ The Transponder System on this car is comprised of two separate systems, the Personal Automotive Security System (PASS-Keyr III) and the Content Theft Deterrent (CTD) System. The Personal Automotive Security System (PASS-Keyr III) is designed to stop vehicle theft by disabling the engine unless a key with a pre-recognized value (transponder value) is used in the ignition lock cylinder. The Content Theft Deterrent (CTD) system is designed to activate the alarm in the event of a forced entry through the doors, such as opening the door without using a working key.
- ♦ When the alarm system is activated the horn will sound intermittently and the exterior lights to flash in unison for about 3 minutes. The components of the alarm system are the door-jamb switches, door lock cylinder switches, door modules, exterior lights, horns, and the Remote Function Actuator (RFA) module.
- ♦ The ignition lock has a code on it and uses the same code series, 0001-1988, as the 1997-98 Buick Park Avenue.



NOTE:
If you can hear the starter engage, but the engine does not start. The PASS-Keyr III system is not causing the problem.

HOW IT WORKS

There is a induction coil with a antenna ring (encased in a circular plastic trim piece), surrounding the ignition cylinder. When activated by the key a Radio Frequency signal is sent out in a circular tunnel field. This tunnel field is usually within in a 2-3cm area. The close area field is necessary so as not to pick up other transponder signals.



Seville

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1998 CADILLAC SEVILLE



MANUFACTURER:	CADILLAC
MODEL:	SEVILLE
MODELS WITH TRANSPONDER:	ALL
TRANSPONDER BRAND:	MEGAMOS
TRANSPONDER TYPE:	FIXED NUMBER
MAXIMUM NUMBER OF KEYS:	10
CODE SERIES:	001-1988 HUF 10-CUT
MASTER KEYBLANK PART #:	See Dealer
VALET KEYBLANK PART #:	See Dealer
AFTERMARKET MASTER KEYBLANK:	N/A
LOCKSMITH PROGRAMMABLE - NO KEYS:	YES
DEALER PROGRAMMABLE - NO KEYS:	YES

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SYSTEM COMPONENTS

The ignition key.

There are two different types of keys that can start the car, one is the Master key and the other is the Valet key.

The master key is easily recognized because it has a Black plastic head on it, with the Cadillac Corporate logo, and the key is stamped "PK3" on one side. The transponder pellet (chip) is tiny and is held into the metal section of the bow by a plastic housing.



The valet key has a Grey plastic head on it and is stamped "PK3" on one side. The other side of the key is missing the necessary center milling to enter the glove box lock and the trunk lock cylinders. The key also has the word "VALET" stamped into the plastic bow.



The PASS-Key III module.

The PK3 module receives the transponder value from the key via the induction coil. This value is then amplified and determined to be correct or not. The password signal is then sent to the car's PCM for starting or blocking of starting.

Induction Coil.

The 1998 Seville use's an in-dash type of ignition lock cylinder. The induction coil is mounted directly on the ignition lock cylinder along with dash face trim. The dash face trim also incorporates the illumination ring. The dash face trim and induction coil are made of plastic and great care should be taken when disassembling these components from the ignition lock cylinder.

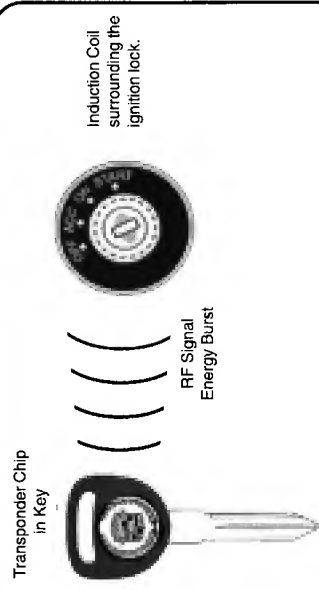


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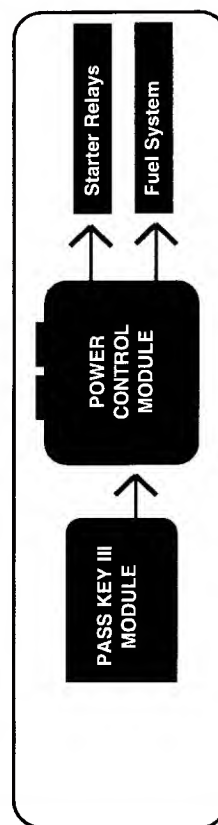
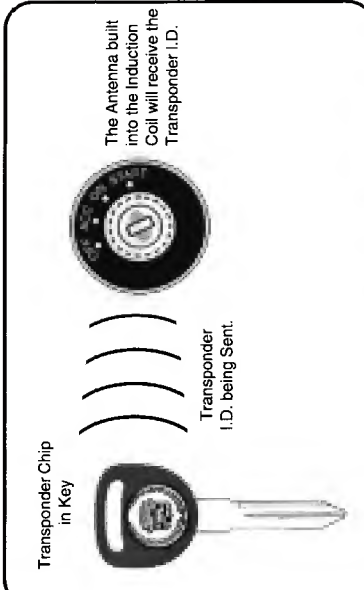
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HOW IT WORKS, continued

When you insert a transponder key into the ignition cylinder the antenna ring will energize the transponder pellet (chip) in the bow of the key.



Once the pellet (chip) in the bow of the key is energized it sends a RF (radio frequency) signal back to the antenna ring. This signal is made up of a unique alphanumeric value. Just inserting the key into the ignition lock cylinder will not activate the recognition process you must turn the key on.



If the value in the transponder key is correct then the PASS-Key III module will send a signal to the car's PCM and will also allow grounding of the starter relay's, allowing the car to start if the key has been turned to the "START" position.

Seville

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ISC West Exhibitor Booth Listings

21st Sentry Monitoring.....	969	CCTMA	205	ExpoGraf CardKeep AB	1934	Kolon.....	1395
3R Technologies	309	CCTV Corporation	713	Extreme CCTV Surveillance.....	535	Kowa Optimed, Inc	310
A & S Security.....	511	CRN Telemetry Devices Inc	972	Extreme Video Inc	405	LG-Honeywell Co., Ltd.....	429
ABM Data Systems	1480	CSI/Speco/Pro-Video.....	536	Eye Q Systems	313	LIS systems	116
ACM U.L. Monitoring Station....	1291	Canadian Flexi Drills	1072	FM Systems, Inc.....	327	Labor Saving Devices	1975
ADDM Marketing, Inc	1953	Canon USA Inc	332	Fanon Courier.....	428	Laminex	1886
ADEMCO	1113	Capitol Sales Company, Inc	1693	Fargo Electronics, Inc	1390	Leads Express	1967
ADI	1413	Capricorn Electronics Inc	1269	Federal Signal Corp	1187	Lease Acceptance Corp	1969
ADT Security Services, Inc	1367	Cardkey Systems, Inc	1637	Fiber Options Inc.....	406	Linear Corp.....	1013
AES Corporation	1180	Carmel Financial Corporation....	262	Fiber Options Inc.....	407	Litton Poly-Scientific.....	200
AIT Corporation.....	1523	Celstar Inc	143	Fiber Sensys, Inc	109	Locknetics Security Engineer..	1268
AMSECO	1368	Central Monitoring Systems	1831	Film Technologies Internat	1384	Louroe Electronics	606
ARK Solutions	1488	Central One Monitoring.....	1388	Financial Security Services.....	1941	Lyle Signs Inc	151
ASC-Ademco Sensor Co	1123	Channel Vision Technology	527	Fire Lite Alarms Inc	1021	M & S Systems	430
ASM Group, The	1955	ChannelPlus/Multiplex Tech.....	443	Flair Electronics, Inc	1276	M K Battery.....	1958
ATW/Alarm Technology Worldwide.	971	Checkpoint Systems, Inc	1935	Folger Adam Security Inc	1070	MCDI.....	338
.....	971	Chevrolet Motor Division	649	For-A Corporation	208	MER Communication Systems..	105
Accele Electronics, Inc	532	Chugai Boyeki (America)Corp ..	937	Frontier Marketing Inc.....	235	MIROS, Inc	1397
Access Control & Security.....	129	Clark Security Products	1760	Fujinon, Inc	1381	MOD-TAP RCS	1925
Access Control Technologies....	742	Code Access Inc	1959	G & K Services.....	330	Macurco Inc	1764
Access Hardware Supply	1990	Code Blue Corporation	222	GNWC	531	Magnetic Automation Corp	1913
Active Control Technology Inc	1393	Coherent Communications, Inc ..	223	GRI Telemark Corporation.....	526	Marlee Electronics Corporation	1192
.....	1393	.....	223	Gaffco Inc	1962	Marray Enterprises, Inc	1170
Adams Rite Mfg. Inc.....	1796	Computerized Monitoring Svcs	1588	Galaxy Control Systems	1869	Marshall Electronics.....	106
Ademco Integrated Technologies....	1129	Computrol Security Systems	1895	Garrett Metal Detectors	1917	Martco	234
.....	1129	Continental Instruments LLC	1892	Genesis Cable Systems, L.L.C	1960	Mas-Hamilton Group.....	1081
Advanced Electronics Group Inc	1881	Contractors Wire and Cable	142	Gentex Corporation	981	Maxwell Alarm Screen Mfg.....	1727
Advanced Technology Video, Inc	416	Corby Industries, Inc	1086	Go-Video.....	1696	May Advertising	1788
.....	416	Courtaulds Performance Films	1087	Golden State Instrument Co	104	Meridian Technologies.....	523
Advanta Leasing Corp	225	Creative4 Systems	1091	Golden Technologies, Inc	1761	Michael J. Kelly Insurance Ag ..	634
Aiphone Communication Systems ..	1669	Crest Electronics Inc.(CCTV)....	139	Goyo Optical.....	140	Micro Key Software, Inc.....	1685
.....	1669	Crow Electronic Eng. Inc	543	Grand Central.....	1866	Micro Technology	427
Air Taser Inc	1961	Cyclovision Technologies	114	Group 4 Securitas Tech Corp..	1581	Middle Atlantic Products	1088
Alarm Monitoring Services	141	Cypress Computer Systems Inc	1762	Guardian Monitoring	1767	Midwest Wholesale Hardware	1173
Alarm-SAF	1965	.....	1762	Gyyr, Inc	629	.....	1173
AlarmSoft Inc	336	D/B Cameras-Microcheck	1625	H.A. Pro	351	Millennium Sensor Corp	1287
Aleph International.....	966	DMAC	929	HID Corporation	1435	Mintron Enterprise USA	1196
Allstate Insurance Company.....	1889	DSX Access Systems, Inc.....	1293	Hanchett Entry Systems, Inc ..	1175	Mirtone	1968
Alpha Systems Labs	301	Dedicated Micros Ltd	621	Hanita Coatings.....	1595	Mitsubishi Electronics America	1487
Altronix Corporation.....	1440	Deister Electronic	1275	Hayden Industries Inc	549	.....	1487
Amano Cincinnati.....	973	Detex Corporation.....	1936	Heifner Communications, Inc ..	1593	Monital Signal Corporation.....	1755
Amazing Controls! Inc	1071	Diamond Electronics Inc.....	1855	Hirsch Electronics Corp	1826	Monitor Dynamics Incorporated	1398
Amcrest Corporation.....	1629	Dice Corp.....	1157	Home Systems Installer.....	652	.....	1398
Ameba Technology Inc	513	DigiSpec Corp	118	Hypergraphic Impressions.....	1396	Monitoring Automation Systems	1163
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American Fibertek Inc	612	Digital Processing Systems, Inc ..	1375	INTELLIKEY Corp	1068	Morse Watchmans, Inc	1957
American Monitoring Svce. Inc	1795	.....	1375	ISO/Rainbow	201	Motorola Indala Corporation ..	1949
American Security Distribution	1931	Digital Security Controls Ltd	1613	Ideal Industries Inc	437	Multimedia Security Service	230
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American Video Equipment.....	516	Ditek Inc	1495	Impac Technologies.....	423	NBFAA - National Burglar &.....	1720
Anchor Pad International	323	DoorKing, Inc	1661	Infographic Systems Corp	1843	Napco Security Group, Inc	1313
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Apollo.....	1775	Dortronics Systems, Inc.....	1297	Inovonics Corp	1769	Network Video Technologies.....	604
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Aqueous Technologies	1865	Echostar Communications Corp.....	243	Intelligent Controls Inc	1973	Northern Video Systems Inc	401
Architectural Control Systems	1274	Edwards Signal & Fire Alarm	226	Interactive Technologies, Inc ..	1441	OSI Security Devices	1929
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Atlas Wire & Cable	1827	Elbex America Inc	322	International Integrated	506	Optex (USA) Inc	1429
B & B Battery (USA) Inc	1174	Electronic Security Central.....	1490	International Security Review....	153	Opticom Technologies, Inc	626
B.E.S. Manufacturing	1890	Electronic Security Devices	1494	Interstate Battery	238	Osborne-Hoffman Inc	435
Bandit USA, Inc	134	Electronic Technical Services ..	552	J.A.M. Plastics Inc	1633	Pach & Company	1692
Barnes & Reinecke, Inc	1932	Electronics Line	1860	J.C. Gury Co	240	PanaVise Products, Inc	509
Belden Wire & Cable Company.....	231	Elite Access Systems.....	1849	J.J. Communications	504	Panasonic Video Imaging Systems ..	611
.....	231	Elk Products, Inc	1875	J.L.M. Wholesale Inc	1169	611
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Bold Technologies Ltd	943	Eltron International.....	1467	J.V.C. Corporation.....	600	216
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Butterworth Heinemann.....	331	Equus Enterprises Corp	349	KP Electronics Inc	1780	Pentax Corporation.....	616
C & K Systems.....	1333	The Essential Guides Ltd	138	Kalatel, Inc	743	Perey Turnstiles.....	1627
C.O.P.S. Monitoring	829	Euro Security News	1085	Kerl Systems, Inc	1996	Philips Communication&Security ..	815
C.R. Laurence Co. Inc	1171	Europlex Technologies USA Inc	1184	Key Systems Inc	1893	.....	815
CADDX Controls Inc.....	1149	Evax Systems	1928	King Central.....	1449	Power-Sonic Corp.....	1635
.....	1149	Everfocus Electronics	515	KingAlarm	1549	Premier Wireless, Inc	212



Prism Video	505	Tane Alarm Products	1728	United Publications	1194	WH Internat'l Response Center	1089
Progressive Electronics Inc	1930	Tecton Inc	306	United Security Products	1736	Watec America Corp	1181
Progressive Marketing	335	Tektone Sound & Signal Mfg	1766	Universal Battery Corporation	1791	West Penn Wire/CDT	514
Proprietary Controls Systems	1567	Telesite USA Inc	1281	Uplink Security	101	Westinghouse Security Elec-	1687
Props by IDM	211	Telexis Corporation	980	Urbaco USA, Inc	1887	Wheelock, Inc	110
Protech/Protection Tech	1943	Terra Publishing, Inc	987	Vicon Industries Inc	837	Wilco Supply	1172
Protection One	135	Texecom, Inc	1954	Video Mount Products	1290	Winfield	1592
QSI Systems	434	Timelox	1084	Video Security Specialists	413	Wing Enterprises Inc	1784
Quartermaster	1486	Tokina Industrial	501	VideoComm Technologies	529	Winland Electronics	1197
ROFU International	1190	Toshiba America Info. Sys	636	Videolarm	1821	The Winsted Corporation	610
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RTL Technology Inc	249	Touchtrak Systems	1858	The Vision Factory	148	Wren Associates	517
Radionics	1349	Trango Systems	737	Vision Research Co	317	X-10 Pro	1649
Ramtech Corp	522	TransTech Systems, Inc	1394	Visions Televideo Technologies	308	Xetron	1621
Research Electronics	242	Tri-Ed Distribution, Inc	1735	Visonic Inc	1374	Yuasa-Exide, Inc	1868
Rokonet Industries	1743	Trine Products Company	1289	Visual Methods, Inc	608	ZERO/EMI/Stantrol	630
Rutherford Controls Inc	229	ULTRAK	1139	Von Duprin, Inc	1575	Zero Stantrol Cabinets	628
STAT Resources	1631	US Tec	348				
Safeguard Security Services	1391	United Avionics	333				
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Samsung Opto-Electronics	123						
Sanyo Fisher USA Corp	1359						
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Securitron Magnalock Corp	1655						
Security Associates, Inc	1294						
Security Dealer	115						
Security Door Controls	100						
Security Industry Association	800						
Security Information Systems	1724						
Security Lock Dist	1793						
Security Management Magazine	1691						
Security News	985						
Security Sales Magazine	1387						
Security Solutions Plus	1759						
Security Technology & Design	1790						
SecurityLink from Ameritech	1080						
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Sensomatic Electronics Corp	1029						
Senstar-Stellar, Inc	1765						
Sentex Systems Inc	1675						
Sentrol, Inc	1323						
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Shepherd Surveillance Solution	417						
Signal Cable Co	1734						
Signal Communications Ltd	133						
Silent Knight Security Systems	843						
Silent Witness USA	316						
Simply Smart Home	453						
Sims	1971						
SmartCorporation/AMP	248						
Smokecloak USA	1496						
Solar Gard/MSC Specialty Film	1075						
Sonntag	1939						
Southwest Microwave	1981						
Sprint North Supply	1643						
StarGate Technology, Inc	233						
Strategic Vista Corporation	237						
Street Smart Security	1730						
Sungard Mailing Services	1885						
Supercircuits Inc	236						
Superscope Technologies, Inc	404						
System Sensor	1039						
Sytron Security Products, Inc	1768						
TOA Electronics	228						
TVX, Inc	204						
Talk-A-Phone Co	622						
Tamron Industries, Inc	117						

TRL



LOCKMASTERS
SECURITY
MANAGEMENT

TM



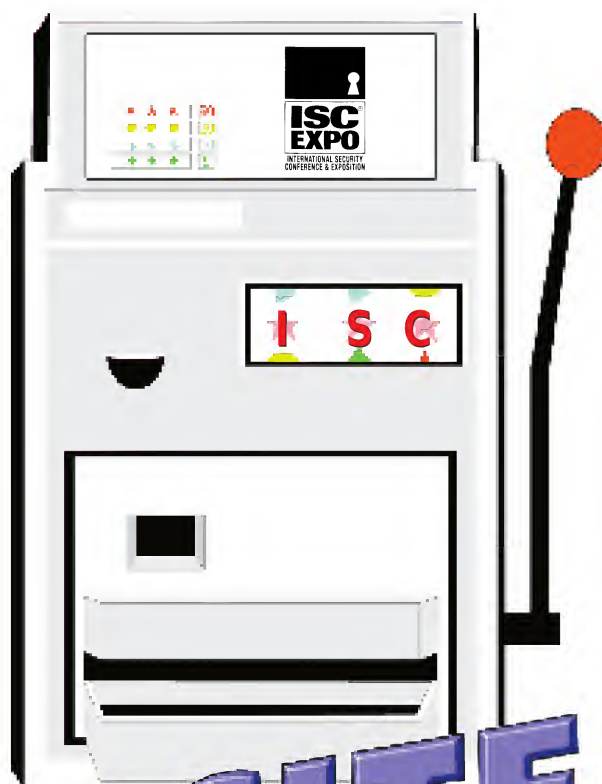
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ISC EXPO EXCITEMENT!



**ISC
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EXCITEMENT!

ISC Expo/Las Vegas '98 will enter the record books as the largest ISC Expo to date when it makes it's scheduled run at the Las Vegas Convention Center in Las Vegas, Nevada March 24-26, 1998. The show floor, expanded from previous years, is expected to include more than 450 exhibitors in 115,000 square feet of displays.

Products on display at ISC Expo/Las Vegas '98 will include state-of-the-art security equipment and services, with technologies running the gamut from the newest in access control and security hardware to integrated systems and home automation. Three pavilions will be featured: CCTV, Security Hardware, and Home Systems.

"ISC Expo/Las Vegas has been increasingly successful with each event. These successes are a result of working closely in conjunction with our partners in the security industry (sponsors and endorsers) to ensure we deliver an event and educational program that is on the cutting edge of the industry it serves," said Eileen Baird, Industry Vice President and Event Manager for Association Expositions & Services (AE&S), the producers and managers for the ISC Expo, "We anticipate that the 1998 event will be the biggest and best ISC Expo/Las Vegas yet."

In addition to the impressive exhibition floor, the renowned ISC Expo Conference Program also returns with a flourish, headlined by several new conference course offerings and a number of special

NEVADA

Las Vegas

security tours. This year's event includes tours of McCarran International Airport, the Las Vegas Hilton Casino, and the Flamingo Hilton Casino.

The ISC Expo Conference Program is designed to provide its participants with the techniques and skills needed to keep up-to-date in the rapidly changing security industry. The program provides training in technical areas as well as business management and provides NTS and ASIS Continuing Education Units and credit hours toward ISC Expo Security Professional Certification. The conference program features a total of 90 seminars, tours and events.

The Keynote Address and Opening Reception will be held from 6:00 p.m. through 7:30 p.m. on Monday, March 23 at the Riviera Hotel Monaco Tower (Room L). In his presentation entitled, "The Security Industry in Year 2003: What Will It Look Like, Are You Ready For The Challenges?", John W. Hesse, Executive Vice President & CFO at Protection One, will address a wide spectrum of issues facing the industry, such as the future landscape for acquisitions, false alarms, verified response, and other services. It will be immediately followed by a reception sponsored by AE&S. The Keynote Address and the reception are free of charge to all exhibitors and attendees.

Joseph P. Freeman, Sc.D., President & CEO of J.P. Freeman Co., Inc. and J.P. Freeman Laboratories, LLC and Jeff Kessler, Sr. Vice President at Lehman Brothers will explain the underlying trends and reveal the newest opportunities for companies to consider at an Executive Briefing Breakfast entitled "Opportunities in a Changing Industry." The breakfast is scheduled from 7:30 a.m. through 8:45 a.m. on Tuesday, March 24.

ISC Expo will be held three times this year: March 24-26, 1998 at the Las Vegas Convention Center, Las Vegas, NV; May 31-June 1, 1998 at Chicago's Metropolitan Navy Pier; and September 1-3, 1998, at the Jacob K. Javits Center in New York, NY. ISC Expo is sponsored by the Security Industry Association (SIA) and the National Burglar and Fire Alarm Association (NBFAA) and endorsed by the Closed Circuit Television Manufacturers Association (CCTMA), Associated Locksmith of America (ALOA), Home Automation Association (HAA), Institutional Locksmiths' Association (ILA), European Association of Security Equipment Manufacturers (EASEM), Satellite Broadcasting & Communications Association (SBCA), Security Magazine and SDM Magazine.

Association Expositions & Services (AE&S) is a division of Reed Exhibition Companies which is the world's leading organizer of trade and public shows with a current portfolio of 310 events servicing 50 industry sectors. In total 96,000 exhibiting companies take advantage of Reed's marketing opportunities which attract nearly 9 million buyers globally. Reed Exhibition Companies is part of Reed Elsevier plc group one of the world's leading publishing and information businesses.

For information on exhibiting or attending at any of these events, visit the ISC Expo Website at <http://isc.reedexpo.com> or contact ISC Expo Customer Service at 203-840-5602. Faxes may be sent to: 203-840-9602. Written correspondence may be sent to: ISC EXPO/Association Expositions & Services, 383 Main Avenue, Norwalk, CT 06851. E-Mail inquiries may be sent to: inquiry@isc.reedexpo.com.

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PRODUCT SHOWCASE

The ISC West Show - March 1998

Circle the numbers on the RAPID REPLY CARD and send it in.

Continental Instruments Cypher® Lock



CIRCLE NUMBER
431

Continental Instruments LLC, announces the shipment of its 150,000th Cypher Lock, the digital access control device which spearheaded the Access Control industry in the 1960's. With over a dozen convenient optional features, many access control dealers and locksmiths find Cypher Lock the perfect solution in many applications where price or convenience are primary considerations. The large CardAccess® 495 system is often supplemented with a Cypher Lock or two even though the Card Access system's feature-rich capabilities satisfy even the most demanding access control requirements.

Radio Key® 600 Audit Trail & Communications

Secura Key announces the RKAT Audit Trail Module for the Radio Key® 600 Proximity Access Control Unit, including FREE, RK-Link™ Windows® 95 Software.

With a serial printer, the user can print a continuous Audit Trail, a report



CIRCLE NUMBER
432

of the last 150 stored transactions, or a Key Tag programming list. With a PC, the user can produce reports, backup and restore Key Tag programming, and copy Key Tag programming from one Radio Key 600 unit to another. With the RKAT module, Radio Key 600 becomes a very cost-effective access control solution for sites with multiple doors where a networked system is not required.

Pet Immunity on New RX-40PI

CIRCLE NUMBER
433



OPTEX introduces the RX-40PI Passive Infrared Detector with Pet Immunity. Objects 16 inches tall or less are rejected by the RX-40PI, eliminating false alarms caused by spot temperature changes such as small to medium sized animals, air conditioners, or moving curtains. Utilizing Quad Zone Logic, the RX-40PI couples signals from its 78 detection zones to determine the size of its target. Quad Zone Logic gives the RX-40PI superior catch and pet immunity over other single technology pet immunity detectors. The RX-40PI also has an insect shield sealed housing and OPTEX's 5 year warranty.

Von Duprin Power Transfers

Von Duprin® Electric Power



CIRCLE NUMBER
434

Transfers (EPTs) have been redesigned to require a smaller door cutout than previous models, increasing the integrity of fire-rated doors in which they are installed. The housing now measures only 9" H x 1-1/4" W x 1-9/16" D.

EPTs are commonly used to transfer power from a door frame to the edge of a swinging door, for door-mounted electric locking and monitoring hardware such as electric latch retraction (EL) exit devices and Chexit® controlled exit devices. When installed, the units are completely concealed when the door is in the closed position.

Door King Enhances Telephone Entry Systems



CIRCLE NUMBER
435

Continued from page 50

Door King Inc., has announced that their PC programmable series of access control systems, model 1815 and model 1817, can now control up to eight doors or gates. This is in addition to the main entry door or gate. The model 1818 access control systems keep a detailed report of transaction activity at each individual entry point allowing the user to create customized transaction reports from their PC.

The expansion of the entry systems is made possible with the use of the companies Gate Tracker™ expansion boards. The Gate Tracker board controls and powers the access device (card, RF, digital, etc.) and reports the usage to the access control system.

The TESA Integra3



The powerful Integra3 is TESA's newest creation, and has been designed to offer the ultimate in flexibility and control.

With TESA's Integra3, facilities can manage up to 65,000 doors and 65,000 users, with up to 3,000 users per door, without requiring a single metal key. Prior to this, management of this capacity was virtually unheard of for stand-alone access control products. Even more, the Integra3 has the ability to provide a complete audit trail of all lock events, which are recorded in non-volatile memory. The Integra3 also features stand alone electronic locks which are based on magnetic stripe technology, and powered by standard AA batteries so that costly wiring is not required.

Securitron BPS Series Power Supplies

Securitron announces that it's BPS



series of filtered and regulated DC battery charging power supplies have now been rated Class II by Underwriters Laboratories. The Class II Listing means that the output wires won't need to be run in conduit which allows substantial savings for the installer. The current limiting series of power supplies come in 12 separate models and are available ranging from 1 to 15 Amps at 12 volts and 1 to 10 Amps at 24 volts. The units are furnished in wall mount hinged steel enclosures with safety warning lamps on the front exterior. Sealed lead acid battery packs may be added to provide automatic backup power or the supplies may operate independently.

Alarm Lock's Sirenlock™

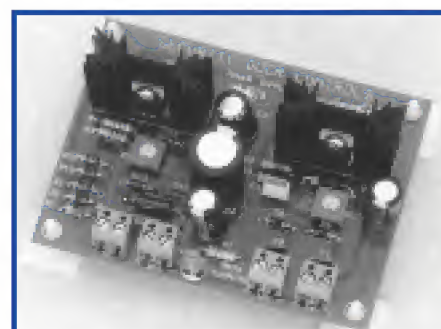


Alarm Lock Systems, Inc. is offering the rugged Sirenlock™ Model 710. A UL listed panic alarm deadbolt device, this unit restricts unauthorized use of exit doors by sounding a powerful alarm yet still provides instant egress in the event of an emergency. A doorway protected by the 710 can be protected by both the high security deadlatch and deadbolt, for added security and confidence.

Comprised of an extruded aluminum channel with steel push bar, the 710 is available in 33" and 48" lengths whose features include a powerful 95 dB dual piezo alarm, 9 volt battery, low battery alert, inside/outside cylinder capability, and non-handed ease of installation. 710 also provides a changeable 2 minute auto reset or manual restore.

New SDC Economy Power Supply

The new SDC 601RFL Regulated Power Supply has dual 12VDC and 24VDC secondary outputs. There is a 1 Amp maximum load whether using



one or both outputs at the same time. To insure that outputs do not exceed 12 and 24V the higher voltage battery charging circuit is separate from the secondary outputs and provides battery backup for both 12 and 24V outputs. One 12V battery provides backup for 12 and 24VDC. Additional batteries can be added for increased Amp hours. The secondary output is not de-rated and maintains a continuous 1 Amp output when charging batteries. The SDC 601RFL is UL Listed, Access Control System Unit with a Class II output.

ITI Business Planning Wizard™



It's the first business planning software designed specifically for the security dealer. Combining ITI's business planning and marketing expertise with the power of Microsoft Word™ and Excel™, Business Planning Wizard gives dealers control over the complex process of business planning. The easy-to-use software leads users step-by-step through the development of a tailor-made business plan with must-have budgets for sales and marketing and up to five-year financial projections. The fill-in-the blanks format is designed to simplify planning and calculation processes without sacrificing sophistication and detail. A financial break-even analysis shows the impact of a low-cost mass market program. The software lets you do days worth of work in a matter of hours.

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Continued from page 54

Sentex Systems



Sentex Systems is pleased to announce the introduction of the new 101 board for the Spectrum/Vista System. For many years, the Spectrum and Vista telephone entry systems have been especially cost-effective and attractive solutions for many buildings and gated communities.

The new 101 board has many new features, including full duplex communications, that will provide clear audio in both directions without clipping, even in high-noise environments. The 101 board Spectrum/Vista also has Sentex's unique, recessed, sidelit metal keypad that is weatherproof and highly vandal-resistant.

Automatic Gate AGS 1200



This amazing new operator lights up the driveway as the gate is opening and for safety and convenience, it continues to provide lighting while the gate is in the open position. It's able to operate with the standard 110 Volt power input or it can also run on 24 Volt power with the use of low voltage wiring and a trickle charger. When using the 24 volt system, battery back up is included.

Standard features of the new AGS 1200 operator are adjustable obstruction sensing, electronic braking system that never wears out, it's self-locking in both the open and closed position, has a rugged 3/16 inch steel frame with a baked on powder coated textured finish, soft start/soft stop protection for mechanical parts, and an emergency manual release system in case of a power failure. **TNL**

DURASWING MK IV

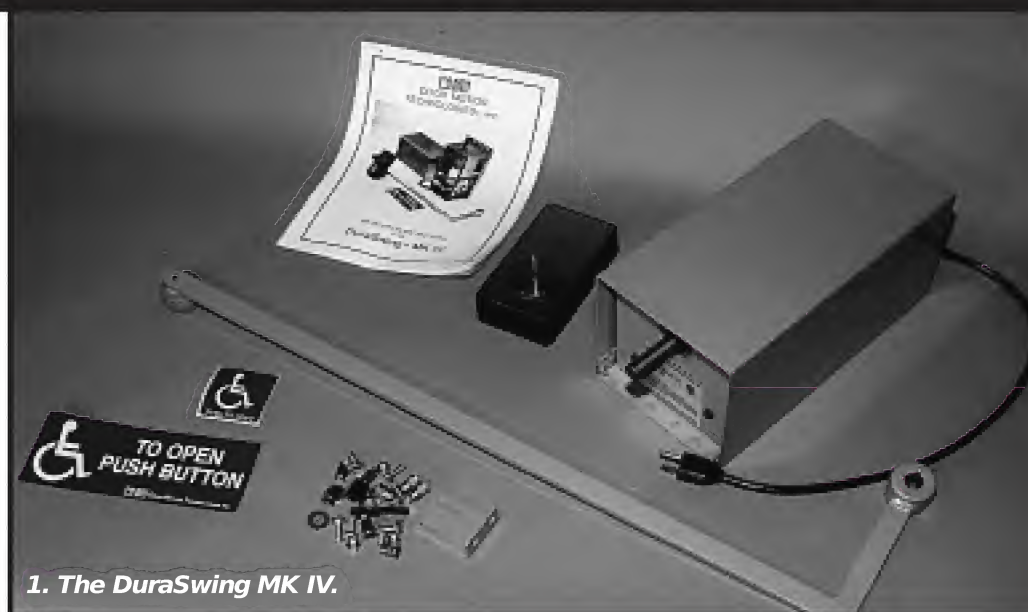
Power door assistance made easy.

Whether it's to meet handicapped accessibility requirements, aid in access control, or simply just for "hands-free" opening convenience, the DuraSwing MK IV may be an answer to automatic door opening (see *Photograph 1*). The MK IV works on single swinging doors, is widely versatile in its applications and mountings, and one technician can complete the installation in about an hour.

Very briefly, a 110VAC outlet will need to be installed by a qualified electrician within 18" of the planned site of the unit. Then, the unit is surface mounted to the door frame and plugged in. The simplest of controls are surface mounted transmitter button switches which operate on the same principle as an automatic garage door opener, eliminating the need to run extra wire (see *Photograph 2*). However; the unit is sophisticated enough to be triggered by other methods, including via card reader, step pad switch, or other hardwire switch. While the unit does not close or lock the door, there is sufficient power (300mA) to operate most electric strikes or magnetic locks.

The main duty of the unit is to push open a swinging door. Because it will not close the door, the door must be equipped with an automatic closer. It doesn't matter whether the closer is surface mounted or concealed, the MK IV will work around the closer (see *Photograph 3*). It is important, however, that the door and closer are working properly. This means that the hinges, closer, frame, threshold and lock latches must be in proper working order, and adjusted properly even down to the weather-stripping.

When checking the door, check the architectural installation of the door. While the MK IV is versatile, the way the door has been installed will



1. The DuraSwing MK IV.

affect the way the opener is installed. Inswinging doors will require an Inswing Bracket (DM-B1) and a Straight Arm (DM-A2). Center pivot hung doors will require an Extended Offset Arm (DM-A3).

The easiest installations happen when:

q The door construction uses a commercial grade steel or aluminum frame with a stile of at least 1-3/4".

q There's a minimum of 10" of clearance between the ceiling and the upper or header door frame.

q There's at least 2-1/2" clearance between the hinge side of the door frame and the wall.

q The door swings out and away from the opener.

q The butt of the door does not swing into the interior space of the building.

However, even if all of these conditions are not met, that doesn't mean that the idea of installing the opener should be scrapped.

Checking the door in which I installed this unit, I found there was no head room above the door header

of the frame. A wall fascia was built out about 2" over the brick wall. A "perfect" installation would have at least 10" or more space between the door frame and the ceiling. The fascia created a "false ceiling" just above the door frame. However, all of the other criteria were met, and instead of having only 2-1/2" between the hinge side of the frame and the side wall, there was more than a foot. I would be able to install a stabilizer bracket (included in the package) on the aluminum frame and mount the operator inverted, with the motor shaft pointing upward.

If there was a wood door frame, I would have to mortise some of the molding, but I would be able to mount the unit onto the wood frame using four 2" lag bolts. A door that swings inward or a door where the butt protrudes inside can be alternatively mounted with optional extended offset actuator arms.

INSTALLATION OF THE UNIT

The unit is bolted to a small sheet of plywood for shipping. After removing the unit it was a good time to remove the chassis cover by



*By Giles
Kalvelage*



2. RF Transmitter Button operates on the same principle as an automatic garage door opener.

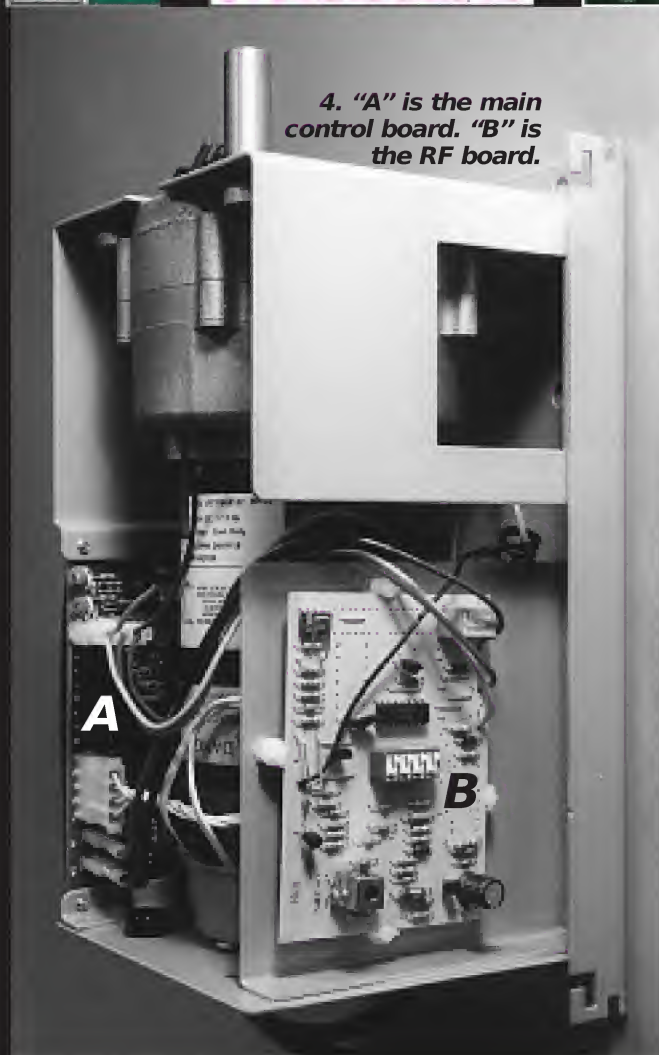


3. The operator pushes the door open, the existing closer will close the door. If the door is locked, the operator will go into safety overload and shut down.

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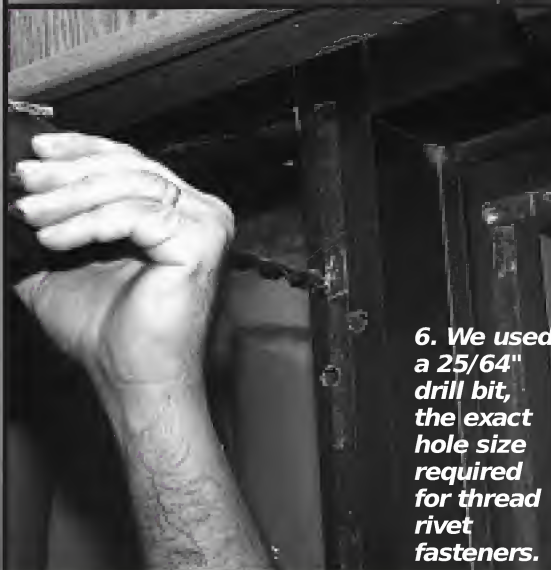
www.laserkey.com



4. "A" is the main control board. "B" is the RF board.



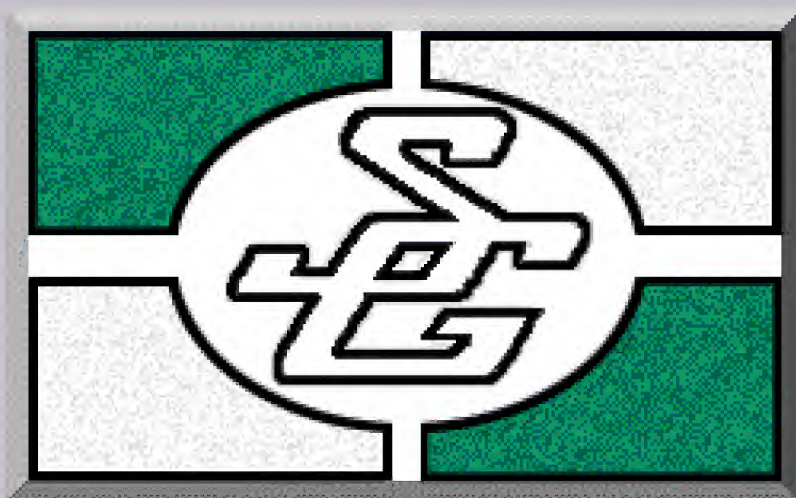
5. Mounting and marking the installation template.



6. We used a 25/64" drill bit, the exact hole size required for thread rivet fasteners.

loosening two nuts at the top and bottom of the unit. The cover will unhook from the chassis, exposing the motor and the control boards. You can see the two electronic boards, the RF board for remote triggering and the main control board for all other functions (see Photograph 4).

The RF board has a series of DIP switches which must set to the exact setting as the remote switches. The main control board houses the micro-processor and terminal strips for accessing special controlling options, such as hard wired switches, alarm shunt, lock release, and motor direction. It also houses potentiometers for adjusting opening travel and opening resistance.



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7. The Thread Rivet Fastener system consists of a TR, a bolt, and a compression plate.



8. Installing the thread rivet.

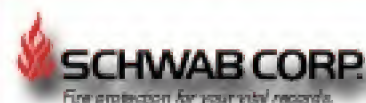
First I plugged the main operator into a 120VAC outlet, connected the 9V battery to the wireless switch, and tested the operator. I wanted to make sure the operator worked and find out which direction the motor shaft would turn. The unit worked fine and with the operator mounted shaft upward, or inverted, the motor shaft turned counter-clockwise. The operator would be mounted architecturally on the stop side of a right hand reverse door, so the shaft was turning properly for this application. Remember, the shaft will rotate an actuator arm which will push the door open. Should the shaft direction need to be reversed, the red and black motor leads can be reversed on the main control board.

The instructions came complete with mounting templates for all available mounting positions, including separate templates for the stabilizer bracket. I needed to choose a position which would allow the actuator arm to pass under the arm on the existing door closer and to allow four mounting bolts to be installed

onto the stile, including the stabilizer bracket. Once this was done, the mounting template was taped into place and the positions marked (see Photograph 5).

I drilled the marked positions with a 25/64 drill bit (see Photograph 6). This drill bit size is critical because special TR (threaded rivet) fasteners are used to hold the unit in place (see Photograph 7). After the holes were drilled, I installed the TR fasteners with the installation tool provided. The rivet was placed in the mounting hole, a 7/16" x 1/4 x 20 bolt placed through the tool and the bolt tightened until the rivet was squeezed and secured around the inside of the hole (see Photograph 8).

Once the TRs were installed, including the two for the stabilizer bracket (see Photograph 9) I hung the unit in place. I took two headless bolts and placed them in TRs and screwed them in about 4 turns or so. This would allow me to temporarily hang the operator in place while securing the unit with one or two more



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**9. Install the
stabilizer
bracket
using TRs.**

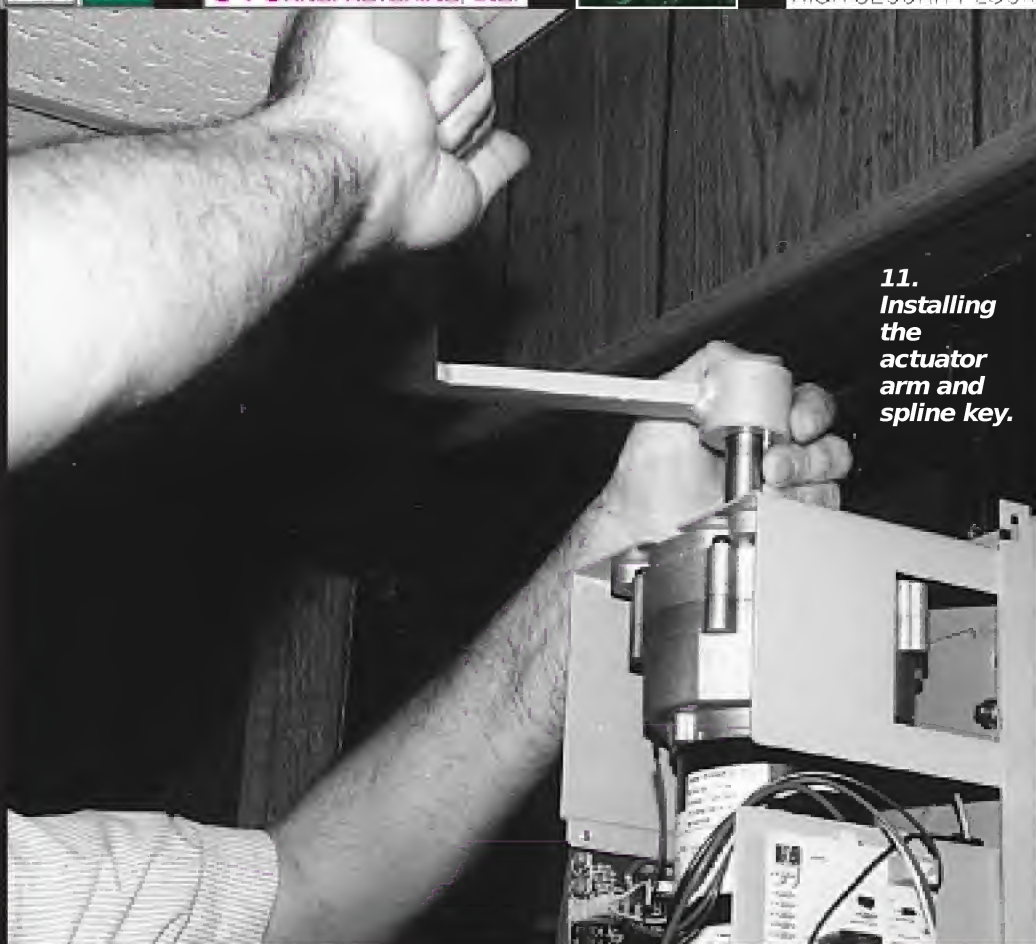
**10.
Hanging
the unit in
place with
two
headless
bolts frees
our hands
to install
regular
bolts.**

standard bolts with lock washers and/or thread locking compound (see Photograph 10). We replaced the headless bolts with a standard bolts and lock washers.

When installing the actuator arm onto the motor shaft it was necessary to rotate the shaft or actuator arm so that a spline key could be inserted into the motor shaft/ actuator arm assembly (see Photograph 11). Once done, I adjusted the actuator arm vertically so that the roller is positioned below the closer arm and above the glass on the door.

I plugged in the operator and gave it a test run. There were two RF transmitter buttons used in this installation, one mounted inside, the other outside, on the glass light next to the door. Both were within 5 feet of the operator. The occupant requested I mount them with double face permanent tape to the glass (see Photograph 12). For a more secure installation, they could have been mounted to the door stile with sheet metal screws.

Next, I activated the unit to check if the actuator arm traveled on the planned path. While it did, other adjustments could be made, if necessary. On the control board, there is a microprocessor which monitors



11.
*Installing
the
actuator
arm and
spline key.*

the travel of the arm. With the help of an encoder, it monitors location, door resistance, and obstructions which may be in the door path. It can calculate how much power the motor will require to open the door to 90 degrees within 4 seconds, with varying door resistance! Door angle and hold open time are readily adjustable to the user as well. Power level is factory pre-set, but can be adjusted.

The door angle and hold open time potentiometers are easily accessible at the front of the control board. The door angle control range is from 60 to 110 degrees. The factory set angle is 90 degrees. If adjustment is



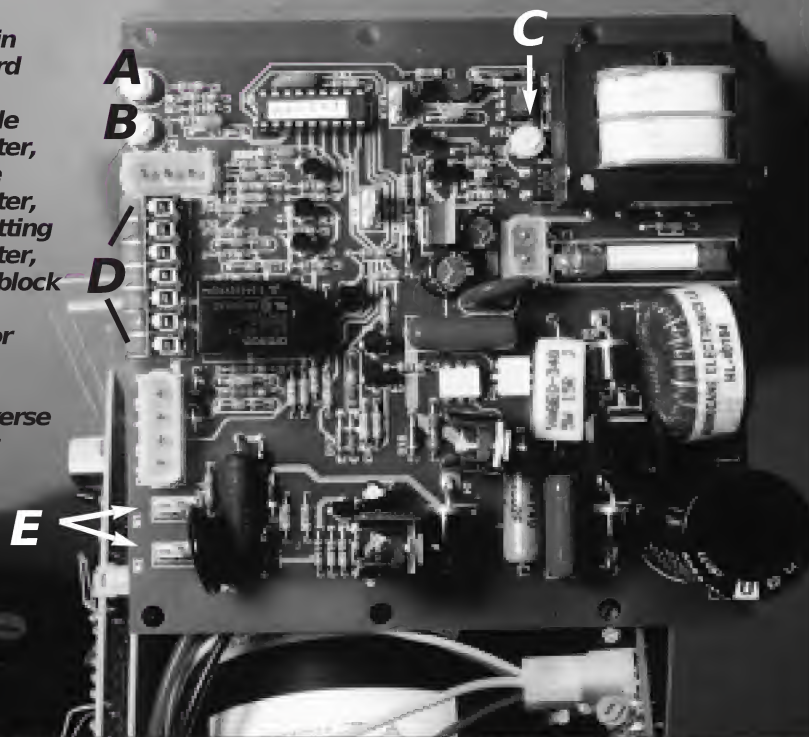
12. *The RF transmitters were mounted back to back on the glass light next to the door using permanent double back tape. A more secure installation would include mounting the button transmitters to the stile with sheet metal screws.*



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13. The main control board includes,
a) Door angle potentiometer,
b) hold time potentiometer,
c) power setting potentiometer,
d) terminal block connectors,
and e) motor terminals - reverse the leads to reverse motor shaft rotation.



14. With the chassis cover in place, the job is complete.



required, adjust the door angle potentiometer in very small increments. Adjusting counter-clockwise decreases the door opening angle, clockwise increases door opening angle, Never adjust fully clockwise as this could throw the operator into a false overload condition, which will shut down the device. The door hold open time is factory adjusted to about 10 seconds. You can change the time by rotating the hold time potentiometer from 5 to 45 seconds (see Photograph 13) for a close up of the control board.

The power potentiometer is more difficult to reach which is at the rear of the control board near the transformer. The power setting is designed to meet safety requirements by limiting the doors opening force to 15 lbs. of resistance. However, some doors need a little extra power to open. As long as the door does not open with a force of over 15 lbs. it is okay to increase the power setting. In other words, if the door itself absorbs an extra 4 lbs. of force because of weight or weather-stripping resistance, the opener may theoretically be adjusted to 19 lbs. of force to compensate. As with the opening angle, do not adjust the power potentiometer fully clockwise or else a false overload condition will occur and the unit will shut down.

Once the operator arm was positioned correctly and the door angle, hold open time, and power settings met satisfaction, I tightened the set screw on the actuator arm at the motor shaft. One last successful test operation and we replaced the cover on the chassis for a completed job (see Photograph 14).

I had fun installing this unit, everything worked as it was supposed to and the overall installation was easier than anticipated. It took about two hours to install, but keep in mind, I was doing a photo shoot at the same time! I really think installations that require only RF transmitter buttons for activation of the unit, half-hour installation times should not be uncommon for a technician who has installed a couple of these units.

Door Motion Technologies recently introduced a full time header mount door operator featuring an integral hydraulic door closer.

For more information on Door Motion Technologies products call: (800) 291-1561 or (616) 321-9330. **TRL**

Opening a Safe Cabinet

by Dale W. Libby, CMS



There are certain safes and money chests that repeatedly cause problems whenever you meet them. If you have ideas about how to open them, and they are wrong, then the safe will win for awhile. I have come upon safes that others have tried to open and wondered what the safeman was trying to do. We all make mistakes. Here is a minor one of mine.

I was called upon to open a safe that was formerly used in a California jewelry store as a back up unit. It was not rated for burglary, just for fire protection. I thought nothing of it and quoted a low price for opening and repair. *Photograph 1*, shows the lock with removable dial and the flat "T" handle (which is indicative of Baum type safes). The real give away was the name "The Safe Cabinet Company" written over the dial ring.

The unit was about 4 feet high, 2.5 feet wide and 2 feet deep. It was not heavy and it was on wheels. A typical Safe Cabinet.

Photograph 2, shows the specific safe label. Among other information, the label states that this is a "Safe Cabinet Special Model" and it was manufactured in Marietta, O. I looked for information in my general safe books, but I came up with a blank. I know that I had seen this unit listed, but I forgot where. It turned out to be listed in the NSO bulletins that you get when you are a National Safeman's Organization member.

If I had looked in my bulletins, I would have had a very easy opening. That wasn't the case and here is the long story told shortly.

Arriving in a dank and dark basement, I was introduced to this safe. It was clearly marked a Safe Cabinet. The dial, dial ring, and outer dial ring escutcheon was easily removable. *Photograph 3*, shows the dial removed



1. Name over dial ring and flat faced "T" opening handle label this clearly as a Safe Cabinet Safe.

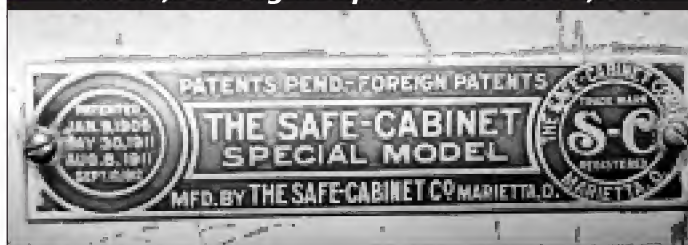
ready for maximum penetration.

What was interesting about the dial is that I had not seen one like this before. It only had 50 numbers. The dialing index was a star, so I thought it might be an Eagle type lock. I was wrong. It turned out to be a Sargent & Greenleaf C85 perforated wheel lock with three wheels and a driver in front.

At the time, I did not know this. What I did know was this type of unit could have incorporated a Yale OC5, or the miniature version called the 0402. Both of these locks, which are geared friction fence designs, are hard to drill. The potential to damage the lock by drilling wrong is very high. Another fact that I remembered was that Safe Cabinet usually mounted the locks directly on the back of the inside door.

On the back of the door is a cam that envelopes the bolt when locked. The actual locking bolts are inside the door. When first drilling, one cannot see the lock or lock body. All that is visible is the

2. The Specific Label reads "The Safe Cabinet Special Model" manufactured by The Safe Cabinet Company, Marietta, O. along with patent information, etc.



3. Everything removed prepared to drill.

insulation and the dial spindle tube. Depending on the door, there is a lot of distance between the front of the safe door and the lock itself.

Not having the correct drilling instructions was not really a problem, I drilled one hole on the outside, and three holes in the back door of the safe. I did not want to damage whatever lock was installed, for I knew that the footprint of the lock was different from Group 2 locks used today.

In *Photograph 4*, you can see my mistakes. The first hole was too high. The second hole, just below it gave me a good reading of the wheels with my Hawkeye borescope. There was one problem, however. The driver turned alright, but the wheel motion of the other wheels was erratic. There was NO consistency. The driver would catch and move the third wheel occasionally by hooking through the wheel gate and not contacting the adjacent loose driver.

The third hole was the charm. I drilled through the lever to remove the fence. I was a little ambitious and continued drilling through the wheel pack to assure that the safe would open. I was not disappointed with the results. The safe opened easily, but it took me about two hours to accomplish. I had never seen a S&G perforated wheel lock, and did not realize its small size and the lack of interior room that it had.

After opening up the unit, I discovered that the "C" clip that held the wheel pack on had broken, and the combination hook had come off the perforated wheel, and was catching in a wheel gate. This made the rest of the wheels sometimes pick up, and sometimes not.

Realizing that trying to dial the unit open was a crap shoot, I opted to drill for the fence on the locking bar lever. I hit it right off, and continued drilling through the lock case. After drilling the fence off, I turned the dial spindle and the lock opened. As can be seen in *Photograph 4*, the locking bolt cam is also on the outside of the inside door. It has a cut-out in its end to accept the bolt of the combination lock.

The correct drilling point for the C85

4. My "Oops Picture" with 2 near misses and one hole right on. Bolt locks in movable cam, here shown unlocked.



lock by S&G is: 5/8 inch up and 1/8 inch to the left of dial center. This will put you at the drop in position. To drill a scope hole, drill 5/8 inch Right Center and 9/16 up.

The drill penetration consists of drilling through the outer skin of the door, through some insulation (Gasp, it might even be asbestos), through mild hardplate (sometimes), through the back of the door into the lockcase itself. Do not give up, the lock is back there somewhere.

The wheels shown in *Photograph 5*, are referred to as perforated wheels because of the holes in the wheel. One just had to move the hooked shaped driver to a different hole and the combination would be changed. Others call this type of wheel a "Hole Change Wheel."

I learned several things drilling this Safe Cabinet safe. Do not take anything for granted. The safe was probably dropped when it was being moved from California, for it had never worked since then. The customers in fact had the correct combination, but since it did not

work, they neglected to supply me with it. It would not have made a difference in this case regardless.

Hope this helps. Open (carefully) and Prosper. **TNL**

5. Numbered wheels for the "Perforated Wheel" type combination change. Others call this a hole change wheel different localities, different terms.



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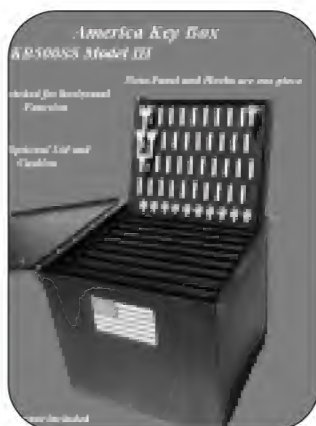
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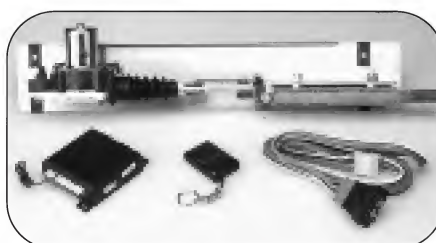
The American Key Boxes are designed with the mobile locksmith in mind. The all new model III is lighter and better. The



hooks are punched out of one solid sheet of 18 gallon metal. The punch out process removes 20 pounds from the 500 hook and 10 pounds from the 250 hook box and panels. The KB500SS stores over 5,000 key blanks at your finger tips. An optional lid and cushion may be added for an extra seat. The Key Boxes help eliminate noise and make inventory easy. They are used by the U.S. Postal Service and F.B.I. Locksmiths.

Cargolock

Cargolock is an innovative security system designed specifically for commercial vans that carry valuable cargo. Tradesmen have traditionally



used padlocks on the doors to keep thieves from stealing their valuable tools and equipment. Cargolock provides a better and much more convenient method for securing these vehicles by using remote control deadbolt locks installed inside the rear and side doors of the van. The doors can't be opened from outside the vehicle.

The system is tailored individually for Chevrolet, Ford or Dodge vans., and is designed for simple, quick and easy installation. Used with bulkhead and window screens, the cargo area of a van is totally secure. Cargolock is available with deluxe remote control features or without remote control as an added feature to an existing alarm system.

Commercial Van Interiors

Commercial Van Interiors has recently updated several of it's popular pre-packaged locksmith van interior arrangements. Updated for the newer

vehicle styles, all full size packages offer a universal fit in all van makes. Most mini-van packages are universal with special designs for extended wheelbase models.

In addition to a variety of modular shelving, bins, drawers, cabinets and accessories ideal for the mobile locksmith, several packages feature a Commercial Van's space saving Redi-Bench retractable workbench module and Sloped Key Machine Bases which tilt cutting machines toward the locksmith for easier viewing of cutting operations.



Redi-Line

Redi-Line Generators have provided quiet, convenient 120 and 230 VAC power for mobile locksmith van applications for more that 25



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years. These generators operate from vehicle batteries and convert DC power to 'True Sine Wave' AC to run power tools and electrical equipment where commercial AC power is not conveniently available. Redi-Line also features an advanced demand start circuit that will start and run the generator only when AC power is required and is backed by a two year warranty.



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large AC motors and heavy inductive loads. Perfect for fully-equipped service vehicles. Frequency controlled operation (+ 1/2 HZ) provides operating stability. Other features include 2 AC outlets, connector for remote on/ off switch, steel cabinet with large mounting flanges and fused overload and short-circuit protection.

Vanguard

Vanguard Manufacturing of New Hampshire has made available a new duty aluminum van rack for vehicles



with rain gutters. A few of the features are: 6000-series anodized aluminum cross-bars, rugged cast end plates, stainless steel hardware, and dual adjustable material positioners. **TNL**



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On the road, most of the locksmithing business comes in the form of changing or "re-keying" locks at houses or businesses. There is usually a compelling human story behind every lock change. Our job, as professional locksmiths, is to carefully and meticulously avoid finding out what that story is.

I say this firstly because, if the reason for the lock change is the expected arrival of a homicidal ex-husband or ex-employee who plans on clearing the building of any life forms more conspicuous than food bacteria, I like this to be a surprise. Sort of a little break in the routine of the day.

I would prefer the customer to simply say, "Could you work quickly? I'm sort of in a hurry." Instead of, "Better work fast, my ex-boyfriend is on the loose again and I don't want you to end up like the last locksmith."

If I am at an eviction I do not want to hear the landlord say, "Instead of rent every month, they send a picture of the devil drawn with something that looks like blood," as he walks down the block to hide behind a telephone pole while I am changing the locks.

These are phrases that I would have had more appreciation for if I had heard them on the phone BEFORE I agreed to do the job. This would have given me the opportunity to respond, "Sorry, I'd love to come over and help you out, but my wife says she finds me much more attractive with my blood on the INSIDE of my body."

The second reason for avoiding the story behind the lock change is that there is never a pleasant answer to the question, "Why are you changing your locks?" In my early years of locksmithing, I would naively ask the customer that question, like an innocent Deer going to see what all the noise was about on opening day of hunting season. I would always get one of three types of responses:

- "I fail to see how that's any of your business farm-boy."
- "Well it all started back several years ago, better have a seat and make yourself comfortable, I'll go get the margaritas."
- The customer would burst into tears and share a harrowing tale of love gone bad.

I was pretty much at a loss as to how to handle any of these responses. When the customer would burst into tears, I would always come up with something very helpful like, "Don't feel bad, my first marriage fell apart also, but the divorce has held together like a rock."

As an example, one of my distraught male customers was having his locks changed because he was going through a divorce. When I mentioned that I had one of those under my belt also, he asked me, "In your experience, is a divorce really as difficult as they say it is."

The only words of consolation I could think of were, "Try to be more positive about the situation. Maybe you will be lucky and the earth will get hit by that giant meteorite that scientists have been promising us."

Another male customer said to me, "This is the third time this year that I've had to kick my girlfriend out and change the locks, but when we get along, we really have a great time together. Do you think I should take her back again?"

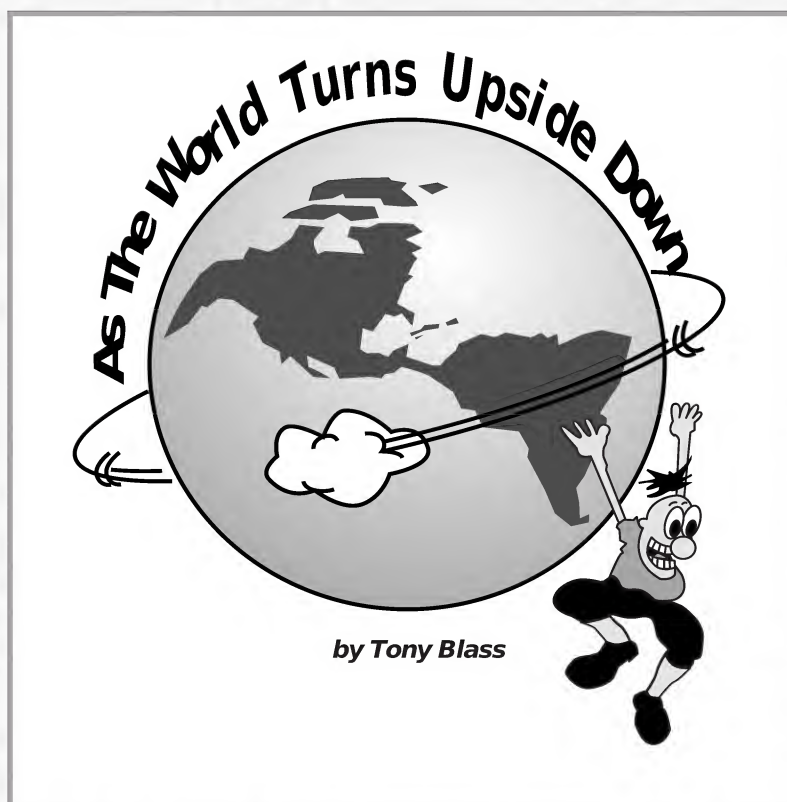
Trying to be sensitive, I drew upon my own experience in a similar situation and advised him, "You should have your facial features and fingerprints surgically altered, then join the witness protection program before she comes back and you two do something really dumb like have kids together."

O.K. I'm not exactly Abigail Van Buren, but my advice is free and worth the price.

When I entered one female customer's house to change the locks, I could not help noticing that the couch, coffee table and other furniture items had been chopped down the middle into two pieces. It looked like Tim Allen from "Home Improvement" had juiced up a weed whacker to about 400 volts and then lost control. When I asked the lady what had happened, she replied, "I misunderstood when my ex-husband said he was coming over to split-up our belongings."

I advised her to be careful if he ever invited her to get together to "hammer out" their differences.

More tales from the trails, next time. **TNL**



Now-a-days, I limit my inquiries to such probing personal questions as, "Hot enough for you?" Or, "I don't mean to pry, but how many keys would you like with that lock change?"

Unfortunately, you cannot always avoid getting involved, no matter how hard you try, because during times of emotional turmoil, people have a tendency to turn to the first person available for guidance and support. Sadly, for many of my customers, that person winds up being me. I try my best, but coming to me for relationship advice is like asking Willie Nelson for help in filling out your income tax forms. It's just not the right thing to do.

THRU THE KEYHOLE

A Peek at Movers & Shakers in the Industry

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The Safemaster Story Revisited

Sometime in 1966, John C. Miller, founder of Safemasters Co., published a modest account of the memoirs, incidents and history of the company entitled *The Safemasters Story*. The forward, written by Gerald J. Connelly, Jr. is reproduced here:

To those casually interested, the existence of a business is readily taken for granted. The Safemasters Story that follows is more than just another business. Granted, it's normal that a thriving business would develop from the vision of an individual, however, this story is unique in that the Safemasters Company was envisioned by its owner when he was

past fifty years of age. It was a dream that would never diminish its expansiveness throughout the entire history, and indeed today Mr. John Miller is effectively contributing to this continued growth.

The passing parade of its employees over the years hold one thing in common, that each was permitted the opportunity to share in developing a company equipped and staffed by personnel which would never be surpassed in the channels of the locksmithing industry.

Many things have occurred within Safemasters and within the locksmith and security industry as a whole since John Miller was joined by his son, James H. Miller, to form a partnership

under the name of Safemasters Co. in 1940. The Millers forged a reputation of unparalleled expertise and inventiveness in the safe business on both the federal government scene as well as commercially. The company continued to grow steadily in the Washington, DC market through 1982 when Safemasters became a wholly owned subsidiary of Security Group, Inc. At that time a new growth period commenced with the acquisition of American Safe and Lock of Silver Spring, MD, owned by Wilson Hobbs. To this day, Mr. Hobbs continues to provide consultative service to Safemasters and the company's corporate headquarters is located in American Safe and Locks' former facility.



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Today fueled by growth from expanded product lines (door and frames, locksmithing, access control, alarm systems and CCTV) and acquisitions; Safemasters operates three separate divisions- Service and Installation, Industrial Wholesale and SM Services National Service. Safemasters Service Division operates out of 16 locations in 8 states. Two markets were entered in 1996 and 1997, North Jersey and Indianapolis. Safemasters provides to its associates a full benefit program including profit sharing and opportunities for advancement made possible by the company's growth in both existing and new markets. Safemasters, like many other companies, is always on the look-out for qualified locksmiths and other security technicians to join their team.

The Industrial (Wholesale) Division distributes locks, door hardware and electronic security products locally from all 15 locations as well as nationally and internationally from its Alexandria, VA warehouse. Safemasters continues to be the largest distributor of Sargent & Greenleaf products worldwide.

The third division of Safemasters, SM Services, was started in 1995 at its Philadelphia branch to augment its own service capabilities in response to the growing demand by many national chain accounts for a single service company for various service needs. In addition to their own 15 locations, SM Services calls upon "service partners" across the United States to perform services for these chain accounts. SM Services presently has active relationships with over 250 service partners nationwide, offering to them some unique advantages to participate, in addition to just the sales volume associated with the service work.

The original "Safemasters Story" attributed much of the companies success to the early associations of John Miller and little has changed in that regard. In fact, as we approach the year 2000, and various tasks become mechanized, the human element continues to grow in importance. To that end, Safemasters has continued to strive for a stable and productive work environment with opportunities for advancement and the availability of a broad range of training topics for its associates.

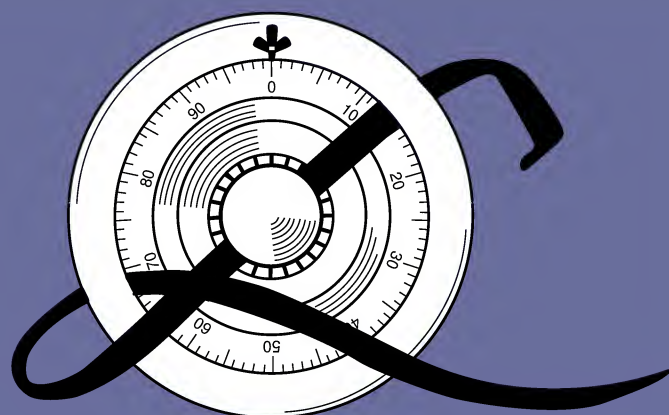
Safemasters corporate office is located at 2700 Garfield Avenue, Suite 200, Silver Spring, MD 20910-1813 and is directed by President S. Robin Scheirer and Vice President Henry W. Raymond. **TNL**

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Reed Report

As you're reading this, we are either getting ready to present our first seminar for 1998, or maybe we just finished it. Be sure to look at the schedule below and see where we will be in coming weeks. This year's seminar will cover all of the new 1998 automobile locks, and believe it or not, some of the 1999 automobiles. There are already quite a few out on the streets now, and more will be coming soon.

I have updated my "How To Be A Millionaire Locksmith" seminar, and I will present it only if you request it. I have already presented my new banquet keynote address at two different Christmas banquets, and it went very well. I received both positive and negative responses, and that is what I am always looking for. I like to get everyone in the audience thinking, and I sure did that. By the way, the title of my new talk is "Police, Tow Truck Drivers, and the Locksmith." Does that get your attention?

I have a lot of fun at both the keynote addresses and the seminars, and 1998 will be no exception. I would like to let everyone know that it is very important to try to attend the seminar that is closest to you, as these are the only seminars we have scheduled for 1998. Hope to see you soon!

Q. I have received several calls lately on making a first key for the 1998 Altima. What is the easiest way to do this?

A. The easiest way is to get the code number out of the manual. If you don't have the manual, disassemble the door lock, or the rear hatch cylinder to get the cuts in positions 3-10. All you have to do after that is progress or impression the remaining two cuts in the ignition (positions 1 and 2). This same method is used on the 1998 Nissan Pathfinder.

Q. I had a customer recently ask me for a "Swege." What on earth is that?

A. The Swege, manufactured by Sentinel Door Guard, Inc., is a specially designed and patented wedge that greatly adds to the security of the door. The top of the Swege utilizes a flexible metal compressor panel that will depress as pressure is applied to it. This prevents the wedge from sliding when pressure is applied to the door. The Swege has an extremely strong directional fabric with over 15,000 nylon grippers on its sole. The special fabric becomes a powerful gripping mechanism as pressure is applied, which provides an increasingly effective block against forced entry. It is an excellent product!



Yours For Better Security,

Bill Reed
Bill Reed

Scatter Shooting while remembering ... Harold Hoffman

Q. What can you tell me about the D-3000 Control Key Blank?

A. This is used to service the Dexter/Master series locksets without taking the knobset off the door. You must purchase the control key blank, and simply make a copy of your customers old key onto the control key, and remove the cylinder assembly. After rekeying, make a copy of your customers new key onto another control key to re-install the cylinder assembly. Then, insert the customer's new key and turn it slowly to the left and right to secure the tailpiece back to the cylinder plug.

The control keys are available from Dan Jacobs, Southern Lock and Supply Company, 800-282-2837. The cost is about .50 for the control key, and \$3.00 for the by-pass key. These also work well when there is no key available. I am sure Dan would be happy to send you more information on the product.

Q. Some of the Nissans, such as the Quest and Maxima, have keyless entry locks. Is the number stamped somewhere in the trunk as it is on Ford products?

A. No. The code and programming information is attached only to the original owners manual. According to Mike Hyde of AUTOSMART, all Maximas leave the factory with the code 5523. The owner of the car can change the code, but must enter a programming code to do this. To use this code, press the "ST" button and enter 5523 to open the doors and trunk.

Q. Do you have a code for Hafele with a number of 8221?

A. The cuts are 53335. The spacing and depths are: shoulder to center of 1st cut = .169, cut to cut = .098. The key blank is Ilco #HU3. Cut bow to tip. 

If you have a question for Bill Reed, would like to talk to him concerning anything in this column, or want to attend a Bill Reed seminar at one of the locations listed below, you may contact Bill directly on his toll free number at: (888) 801-2003.

Mar. 21	Honolulu, HI	Aug. 15	Memphis, TN
Apr. 18	Denver, CO	Sept. 26	San Antonio, TX
May 2	Phoenix, AZ	Oct. 17	Washington, DC
June 6	Seattle, WA	Nov. 7	Salt Lake City, UT
July 18	Columbia, SC	Nov. 21	Tulsa, OK
Aug. 1	Kansas City, MO		

TECHNITIPS

'98 Year-End Prizes!



Grand Prize

HPC's 1200PCH
Punch Machine



1st Prize

Silca Bravo Duplicator



2nd Prize

S&G 6120
Electronic Safe Lock



3rd Prize

Curtis 2100 Duplicator



4th Prize

\$500 in All Lock Products



5th Prize

\$500 in ASP
Auto Locks



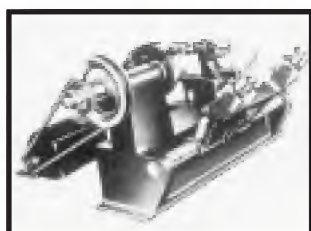
6th Prize

SDC Magnetic Lock,
Keypad and Exit Switch



7th Prize

Arrow Exit Device
and Mounting Kit



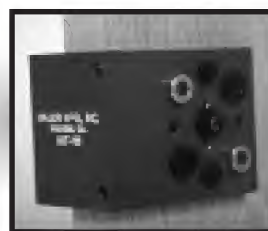
8th Prize

Foley-Belsaw 200
Key Machine



9th Prize

Securiton DK-26
Touchpad and Cpu
Board for Magnetic Lock



10th Prize

Major
Manufacturing's
HIT-111 Drill Guide



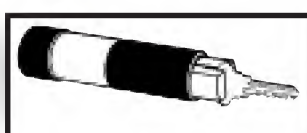
11th Prize

Dewalt Cordless Drill



12th Prize

Sieveking Products
Squeeze Play



13th Prize

Framon Impressioning
Handle

**The 15
Minute
Safe
Opening
Technique**

14th Prize

Book — 15 Minute Safe
Opening Technique by
Jake Jakubowski



15th Prize

Slide Lock's
Master "Z" Tool Set

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- All Lock Ford or GM Kwikit
- Aero Lock Tryout Key Set
- Strattec Racing Jacket
- HPC Pistol Pick™
- Sargent And Greenleaf
4400 Series Safe Deposit Box Lock
- A-1 Security Products
- Silca Key Blanks (100 Blanks)
- Pro Lock Pk 15
Professional Lock Pick Set
- Tech Train Training Video
- Sieveking Products
Gm E-Z Wheel Puller
- Major Manufacturing Products
- Slide Lock's "Z" Tool Opening Set
- The Sieveking Auto Key Guide
- Jet Key Blanks (100 Blanks)
- High Tech Tools
- LaGard Combo Guard



16th Prize

Falle Pick Set From Mark
Bates Associates



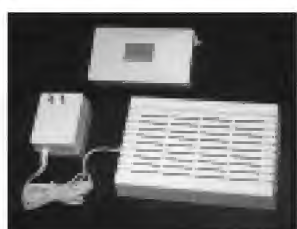
17th Prize

Baxter J V-1 and
J V-5 Code Books



18th Prize

ABUS Padlock's Marine
Padlock Display



19th Prize

Rodan's AV 100 Heavy
Duty Door Annunciator



20th Prize

ESP Products Sampler



21st Prize

Detex ECL-8010W
Wetlock®



22nd Prize

LaGard "Smart
Guard"®



23th Prize

M.A.G. Engineering
Sampler



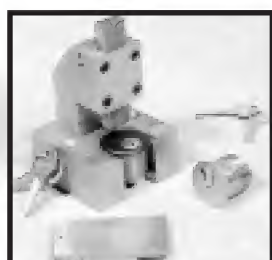
24th Prize

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Products



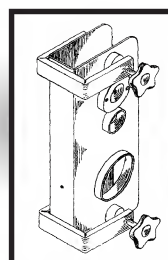
25th Prize

High Tech Tools
2500 Pro Set



26th Prize

Accu-Mark™ Key
Stamping Machine



27th Prize

A-1 J-50
Installation Jig



28th Prize

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Hamilton's
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Simply send in your tip about how to do any aspect of locksmithing. Certainly, you have a favorite way of doing things that you'd like to share with other locksmiths. Write your tip down and send it to:

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The National Locksmith,
1533 Burgundy Parkway, Streamwood,
IL 60107-1861 or send your tips via
E-mail to: Natlock@aol.com

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If your tip is published you will win one of the monthly prizes listed. At the end of the year, we choose winners from all the monthly tips published, that will be awarded one of the fabulous year end prizes. All you have to do to win is enter.

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*Tips
start
on next
page!*



ALL-LOCK KWIKIT WINNER: Furniture Lock Picks

While trying to unlock antique furniture — desks and — cabinets with the old post and bit style locks, I have used everything from a collection of old keys, to a bent wire, to a special set of picks that I bought for the job. None of these methods gave me the results that I wanted, so I set out to make my own picks for these pesky locks.

The picks that I made were fashioned from brass tubing, brass rod, two axle gear collars, silver solder and propane torch. If you decide to make your own set of bit and post picks, most of the materials that you will need are available in hobby shops and your own salvage bin.

The materials you will need are as follows: 3/32" and 1/8" solid brass rod, 1/8", 5/32" and 3/16" brass tubing, one 5/32" and one 3/16" axle gear collar, silver solder, propane torch and a Dremel Tool. These materials will make two picks that will accommodate various sized post sizes. *Illustration 1* shows you how to assemble these picks.

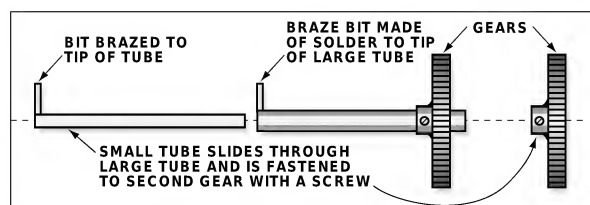


Illustration 1.

For the smaller pick use a 3-3/4" piece of 1/8" brass tubing which fits inside a 2-3/4" piece of 5/32" tubing. On the larger post pick, a piece of 5/32" tubing is cut to slip inside a 3/16" tubing (same lengths as the smaller pick). At this point, use a piece of solid rod to fill in all but 3/4" (from the bit end) of the smaller tube of each pick and then solder that rod in place. Make sure that all soldered joints or connections are ground, filed or sanded smooth so that the tubes are allowed to slide freely within the larger tube of each pick.

As you can see in the *illustration*, the solder that you braze with is shaped to serve as a bit when soldered to the tip of each pair of tubes. The bits need to be shaped and formed from solder. The bits are 1/16" wide and 3/16" tall. You will

A Few Words From Jake...

I've been so busy with the year-end prize winners list in January, and the great new year-end prize list for 1998 that I forgot to mention that February started my fifth year as the editor of this column! Which just goes to prove that what one bullfrog said to another is true: "Time sure is fun when you're havin' flies!"

All right! So I took advantage of my literary license and turned a truism into a malapropism. The truth of the matter is that I have really enjoyed working on this column and seeing it grow. Thanks to the tipsters and the prize contributors, this column is bigger and better than it's ever been.

There's no reason in the world why you haven't sent in a tip. Even if your printed tip does not earn you a year-end prize, you'll still receive Locksmith Bucks, a Tips book and a monthly prize. Now, if that news doesn't make you want to sit down and write me a letter, I don't know what will. So, get cracking and send me those tips and ideas. Just make sure to remember to put your name and mailing address on the letter.

Y'all heah me, now?



by Jake
Jakubowski

need to cut a small slot in the end of the tubes to accommodate the bits and then solder them into place. Then file to fit and make sure that the small tube fits completely into the larger one, turns freely and the bits fit flush to each other.

Now slide the smaller tubes into the larger tubes and attach the appropriate gear axle collar to each of the smaller tubes (again, opposite the bits). Tighten the set screws supplied with each collar (the solid rod that you soldered inside these tubes earlier will keep the tube from collapsing).

To use the tool, insert the appropriate sized post pick in the lock and utilize the smaller tube to apply the pressure to retract the bolt and the larger tube to lift the levers (or on the simpler locks, lift the spring loaded block).

If your pick only partially retracts the bolt, use a stiff "L" shaped wire to finish the job. I have found these picks to be effective tools for opening a wide variety of antique cabinet locks, etc. If you decide to make your own set, the majority of the time you spend fabricating them will be spent dressing the welds so they mesh flatly and work smoothly.

Leo Koulogianes
Tennessee

[Editor's Note: Leo sent me a pair of his post and bit

picks. I used the larger pick to open an armoire with a simple lever lock on it about as fast as you could by using a key. I tried the smaller pick on an old jewelry box with the same results. Leo, thanks for taking the time to share this information. I think it's a great tip. I also want to say thanks for the bit and post picks that are now a part of my picking arsenal.]



AERO LOCK TRY-OUT KEY SET WINNER: The Door Keeper

My service van has double rear doors that always seem to get blown shut while I'm standing back there trying to do something. Bungee cords are not a good option because they don't look professional and can be a hazard to myself or one of my customers if they suddenly let go.

To solve this problem, I welded two large nuts (one on each door) to the top rail of the doors. Then, I used a 6' piece of rod with a four inch bend in each end, making it look like an elongated "U" (see *Illustration 2*).

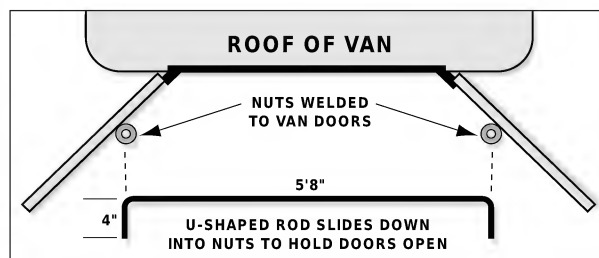


Illustration 2.

Continued on page 78

Continued from page 76

Now I just open the doors all the way, slip my custom made door holder into the nuts and can work at the rear of my van without worrying about the doors slamming into me.

I'm six foot tall and with this door holder on my full sized van, I can comfortably work in the area without hitting my head.

In addition, I have gotten some great comments from my customers about this door holder and don't hesitate to let them know that I can be just as creative in solving their security needs.

Vincent Chestnut
Maine



**STRATTEC RACING
JACKET WINNER:
Latch Bolt Locator**

Like many locksmiths, I've tried to mark the location of the latch bolt in the frame when installing deadbolts in a number of different ways. Now, I know that everyone has their favorite little trick, but I wanted to do something that would guarantee me a 100% accurate mark each time I used it.

Finally, I hit on the idea of using 2" long by 1" in diameter piece of broom handle to make my strike locator (see

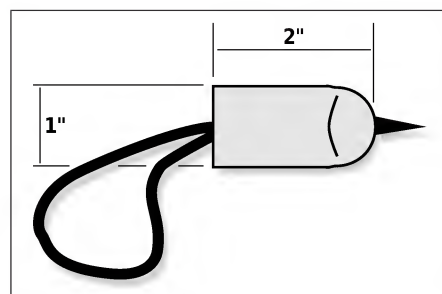


Illustration 3.

Illustration 3). First, I drilled a 1/8" hole about 3/4" deep in one end of the wood. Next, I rounded the wood as shown in the illustration and then gently hammered the nail into the hole. I cut off all but about 1/4" of the nail and sharpened it to a point.

To finish my tool, I drilled an 1/8" hole in the opposite end, forced a loop of string into the hole and secured it with a small plug and some glue.

Now, after I cut my crossbore and edgebore for my deadbolt (or knob set), I insert my strike locator in the edgebore (latch) hole, close the door firmly and then push the strike locator against the jamb with my finger or a screwdriver handle. When I pull the locator back by the string and open the door, there is a perfectly centered mark for the strike hole to be drilled.

With firmer pressure on the end of my locator, I can even get a good mark in a metal jamb.

Sam Alexander, CRL, RST
Canada

[Editor's Note: Sam, thanks for a great tip. I've been carrying the same wooden locator in my tool box for over ten years now. Does it work as well as you say? Every bit and then some. I have tried a number of strike locators during my career as a locksmith and I'll take my old, plain wooden one with the frayed string on it every time.]



**HPC PISTOL PICK
WINNER:
Trunk Opening**

I am often called to open automobile trunks to retrieve keys that someone inadvertently locked inside. On many of the newer Chrysler products, I find that they have a trunk release (in the glove compartment) that will work with, or without, a key in the ignition.

When a customer calls with one of these vehicles, it is usually because the keys are in the trunk and the doors, or the doors and glove compartment, are locked. After gaining entry to the passenger

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compartment, I gently wedge the upper left hand corner of the glove box open (being very careful not to place the wedge too deep or exert too much force on the lid) and then use an "L" shaped probe to press the trunk release button.

On the newer Chrysler Sebring convertible models with the glove box in the center console, I gently wedge the lid from the rear and use a probe light and probe to locate and depress the trunk release. Kevin Winkler
South Carolina

[Editor's Note: Kevin, thanks for your tip. However, I would suggest that the next time you encounter this type of opening, you try to pick the glove box lock with your new pick set. Wedging the glove box doors should be used only as a last resort, since the materials that comprise the doors have been known to crack or snap easily.]



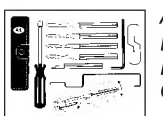
**SARGENT &
GREENLEAF WINNER:
McGunn Safe
Opening**

I recently had to open two McGunn safes in which the single nosed safe deposit lock had caused a lockout. These locks have a "T" type extension that is attached to the lock bolt with a small screw and then goes through the lower door bolt when turned to the locked position.

On the first safe, the screw came out of the bolt on the bottom door causing me to have to drill the door. After the door is unlocked with the key, push back the locking bar with a small awl.

The second safe would not open because the extension had broken away from the lock bolt itself and could not be retracted with the key.

I drilled both doors 2" left, and slightly above (between nine and ten o'clock) the center of the nose piece. A quarter inch hole will usually get you what you want, but you might find that a slightly larger hole will make fishing the bolt back easier. The safe doors both drilled fairly easy, with no hard plate to contend with. Al Root
Pennsylvania



**A-1 SECURITY
PRODUCTS WINNER:
Mortise Lock Cavity
Cutting**

I don't install enough full mortise locksets on wooden doors to make buying an expensive installation jig practical. Instead, I use a #108 Kwikset Combination Drill Jig, which is used to install cylindrical

locksets and deadbolts, to help me cut the mortise pocket that I need when I do install a full mortise lock.

First, I mark the door's edge to find the top and bottom measurements for the lock's body. Then, I attach the jig to the door so that the edgebore hole guide is about one third it's diameter below the top line. I then cut my first hole about an inch or so into the door.

Next, I move the jig down to where the edgebore hole guide is about one third it's diameter above the bottom line and drill a second hole. Now it's

just a matter of raising the drill guide about one third of a hole at a time and cutting overlapping holes (see *Illustration 4*) within the space that I've marked on the edge of the door.

After removing the drilling jig, I chisel out the cavity to nearly the depth of each hole, leaving enough material at each drill point to act as a drill guide for the hole saw until I reach the necessary depth.

At this point, I insert the lock in the cavity (removing to chisel more material as required) until the face

Continued on page 82

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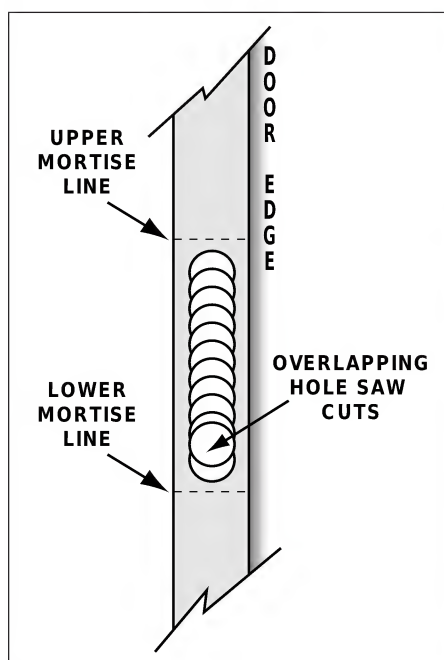
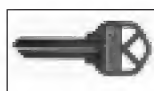


Illustration 4.

plate rests snugly against the door's edge. Then, I mark all the way around the edge of the face locks face plate, remove the lock and chisel out sufficient material to allow the lock, face plate and trim to set flush with the edge of the door.

All that needs to be done then is to mark and cut the necessary cross bores for knobs, cylinders and thumb turns, etc., install the trim and keepers and the job is done. William Howard
Virginia



SILCA BLANKS (100)
WINNER:
Adams Rite
Replacement Screws

If you lose or strip the small screws that hold the face plate on the Adams Rite MS type locks, don't get frustrated. The chances are very good that a suitable replacement is right in your tool kit or truck.

You know those dandy little screws that are half wood screw and half machine screw and come with new locksets? Just cut off the wood screw end and leave about 5/32" of the machine screw end and it will work very well in the Adams Rite application.

I use a wire stripper (solderless terminal crimper screw cutter tools) to cut the ends off those screws when I need a replacement. It works great and saves time and frustration.

Steve Millhorn
California



PRO LOCK PK 15
PROFESSIONAL PICK
SET WINNER:
Tool Protector

If you use the Keedex K22 Lever Tool to open doors with lever trim hardware on them, you will find that the bottom of the doors (especially metal doors) frequently have sharp edges on them which can cause the pulling cable to fray or break. To prevent this from happening to my tool, I have covered the cable with a small diameter plastic tube which protects the cable from fraying on a sharp door edge.

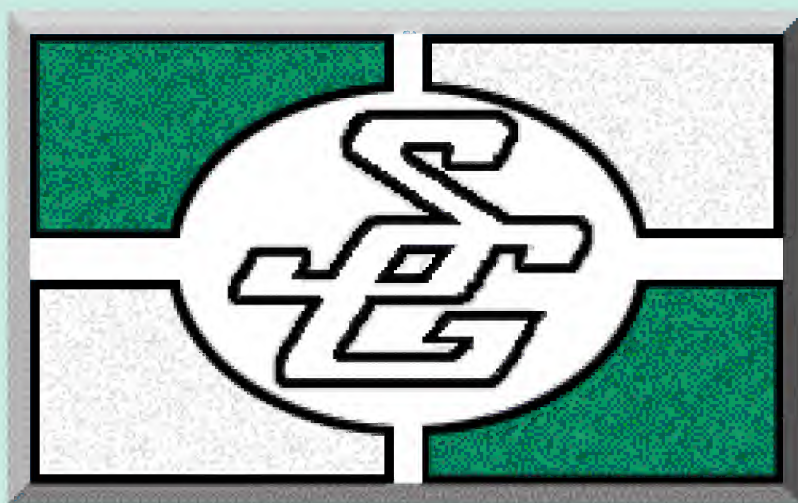
Werner Schulz
Germany



TECH TRAIN TRAINING
VIDEO WINNER:
Magnetic Lock Pick

A customer needed a padlock removed because they had lost the key. When I approached the lock to pick it, I was surprised to find that it was a magnetic lock and had no keyway. The padlock was a CONCH (see Illustration 5). Before cutting the lock off of the staple, I decided to try "picking" it with a magnet.

Using my small pocket screwdriver with a magnetic tip, I slid the magnet



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down the recessed slide portion of the padlock while pulling on the shackle. When I reached the bottom of the padlock, the shackle released!

I tried the same procedure with a larger magnet without success. The

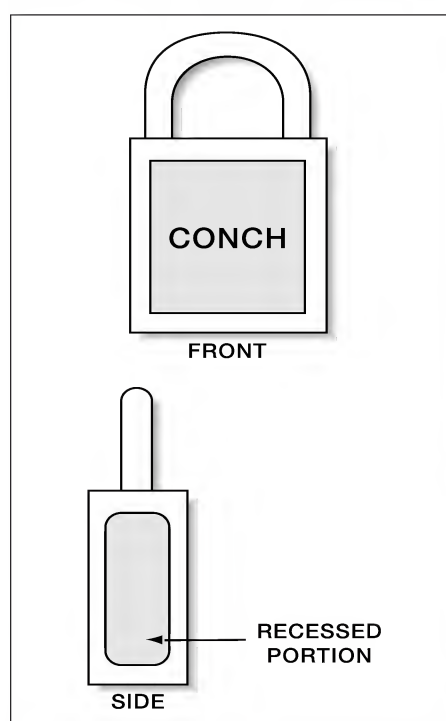
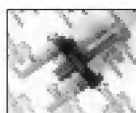


Illustration 5.

small magnetic screw driver was the key to picking this lock.

Gary Milligan
Missouri



SIEVEKING PRODUCTS
GM E-Z WHEEL PULLER
WINNER:
**Progression Chart
Keeper**

An easy way to keep all those progression charts available when the "gray matter" wants to let you down, is to type them up and laminate them to the fronts of magnetic business cards or calendars. Then store them with your auto key clippers, or stick them to the inside of the door of your van where they'll be handy when you need them (see Illustration 6).

William Borner
Pennsylvania

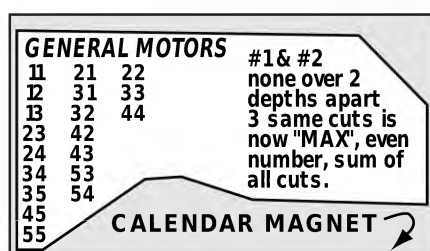


Illustration 6.

MAJOR
MANUFACTURING
PRODUCTS
WINNER:

Master Lock Removal

Master key-in-lever locks can be rekeyed without having to remove the lock from the door. To do this, first pick the plug counterclockwise one quarter turn and push in on the turnbar with any pick that has a narrow flat edge. If you're using a pick gun, the needle pick of the gun will work well.

Now turn the plug another quarter of a turn CCW. At this point the top pins may catch slightly in the bottom of the keyway. If they do, push against them with the flat edge of the pick that you have in the keyway and turn the plug further another quarter of a turn CCW.

When turned to this position the turnbar (tailpiece) of the cylinder is in the locked position which is necessary to allow you to depress the retainer that will allow you to remove the lever after turning a further quarter of a turn CCW. If the handle will not pull off, use a pick or the tip of a key to wiggle the keyway into position to depress the retainer and remove the handle.



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With the handle off, you can perform whatever service is necessary. Then you must check the plug for smooth operation and reinsert the cylinder into the handle, push the handle on until the retainer snaps in place. Pick the cylinder using the flat edge of the pick and turn it 180° clockwise until the pins again catch in the keyway. Lift them out with the flat end of a pick, turn the plug another quarter turn clockwise, push the turnbar in with your pick and turn the final quarter turn clockwise to complete the service procedure.

Robert Daniels
Vermont



**SLIDE LOCK'S "Z" TOOL
OPENING SET WINNER:
Chuck Key Holder**

The last time my drill bound up in a door, it launched my chuck key somewhere in the upper stratosphere, never to be seen again. I was not able to find what I considered to be a good, commercially available chuck key holder, so I made my own in the following way (see Illustration 7).

First obtain a Master padlock shackle chain and two collars. Next remove the bracket that normally secures the chain to the fence or

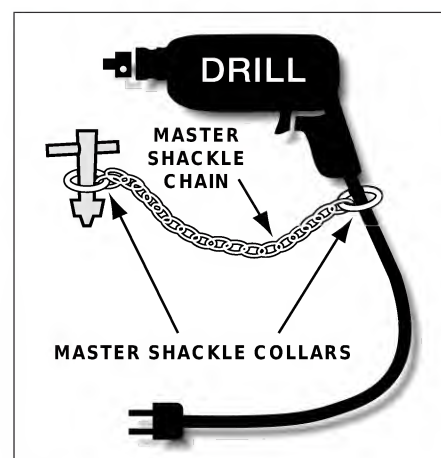


Illustration 7.

building. Now, install a shackle collar on each end of the chain. Attach one of the collars to the chuck key, and the other around the power cord to the drill as shown in the illustration.

You now own a heavy duty, stay-where-you-put-it chuck key holder!

Terry Heinrichs, CRL, CJL
Alaska



**1995
THE SIEVEKING AUTO
KEY GUIDE WINNER:
Creating Ancillary
Services**

If you do business out of a shop location and want to increase your income, take a look at your FAX and copying machine. They're income producers if you let folks know that you will send faxes (\$2.50 per page) and make copies (.25 a pop). If you have the room you can also add about twenty mail boxes at \$6.00 per month. This will quickly increase shop traffic. If you're so inclined, you can even add a "Pack, Wrap & Ship" service.

I installed 144 mail boxes in my shop in which 50% are usually rented. With that income and the income from faxes (20 a day) and approximately 400 copies a day for customers that don't want to stand in line at the local Post Office, printer or office supply, our shop has become very self-supportive.

Additionally, our service calls have increased from four every couple of days to ten a day! Key duplication has jumped from about forty keys a week to over one hundred a day. This is because these ancillary services draw customers that not only have things copied, faxed and shipped, but that tell other folks, friends and neighbors about the best security deals in town.

SRI
SECURITY
RESOURCES INC.

**SRI and Steve Young are
working together to bring
you the best in locksmith
tools and supplies.**

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Times are changing and we have to keep up with those changes. This is one way to stay ahead of the curve.

Lee Whiteford
California



**JET KEY BLANKS
WINNER:
Snagging the Stick**

After finishing a service call to provide a master keyed set of padlocks for a John Deere front loader, I was stopped by the contractor who asked me if I could take a look at his Mack truck. It seemed that the oil dipstick had broken off about 4" from the handle and he wanted to see if there was any way I could retrieve the broken end for him.

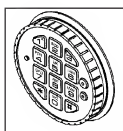
After about ten minutes fishing around in the dipstick tube, I finally managed to snag the broken dipstick with a pick and pull it out of the tube.

Needless to say, the customer was happy enough to give me a new hooded jacket with the contractors logo on the back.

The moral of the story is: Looking for creative ways to utilize your

locksmith tools to satisfy a customer can pay off in unique ways.

Henry A. Jewell
New Jersey



**LA GARD WINNER:
Face Plate Shim**

If you've ever chiseled the mortise for a faceplate too deep, there is an alternative to using cardboard, wood or an extra face plate as a shim to bring the face plate flush with the jamb. This method also allows the shim to stay in place when the homeowner or painter removes the faceplate to paint.

Install two, one on top and one under, the strike hole in the jamb with flat head screws. Screw them down until the face plate would be flush with the jamb when installed.

These screws give you a solid base for the strike plate and are infinitely adjustable shims that will never get lost.

Vincent Chestnut
Maine



**HIGH TECH
TOOLS WINNER:
Credit Card Lock
Linkage Holder**

When removing door locks from a car (such as Ford Taurus), to rekey or

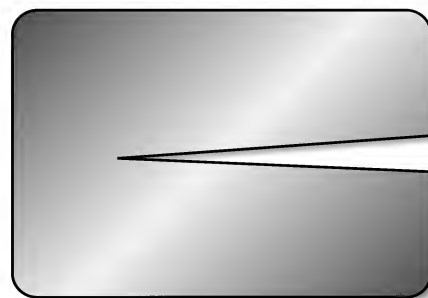


Illustration 8.

replace, the linkage can fall back into the door cavity if it is not retained in some manner.

Many locksmiths use needle nose ViseGrips or hemostats to retain the linkage. These tools can cause scratches in the paint which could lead to a damage claim against the locksmith.

Instead of using metal tools to hold the linkage, use an old credit card or piece of plastic with a 2-1/4" slot cut in one end (see *Illustration 8*). After removing the lock, slide the slot of the plastic card over the linkage and let it rest against the door. The plastic will hold the linkage securely until you're ready to reassemble the lock.

Mack Adkins
California

TNL



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Road Rally

A showcase of locksmith service vehicles.

If you think your vehicle has what it takes to be featured here, send photographs and descriptions to:
The National Locksmith, Road Rally, 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861.



Owner: Dennis Harmon,
Northglenn, CO
Model: 351 Windsor



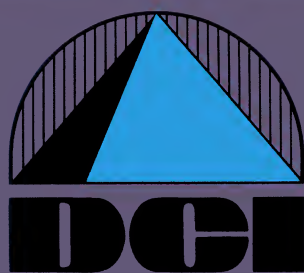
ASP Covers the World of Auto Locks

[Click here for more information](#)

Road Rally



Owner: David Cerullo,
Hamburg, NJ
Model: 1994 Grumman
Truck

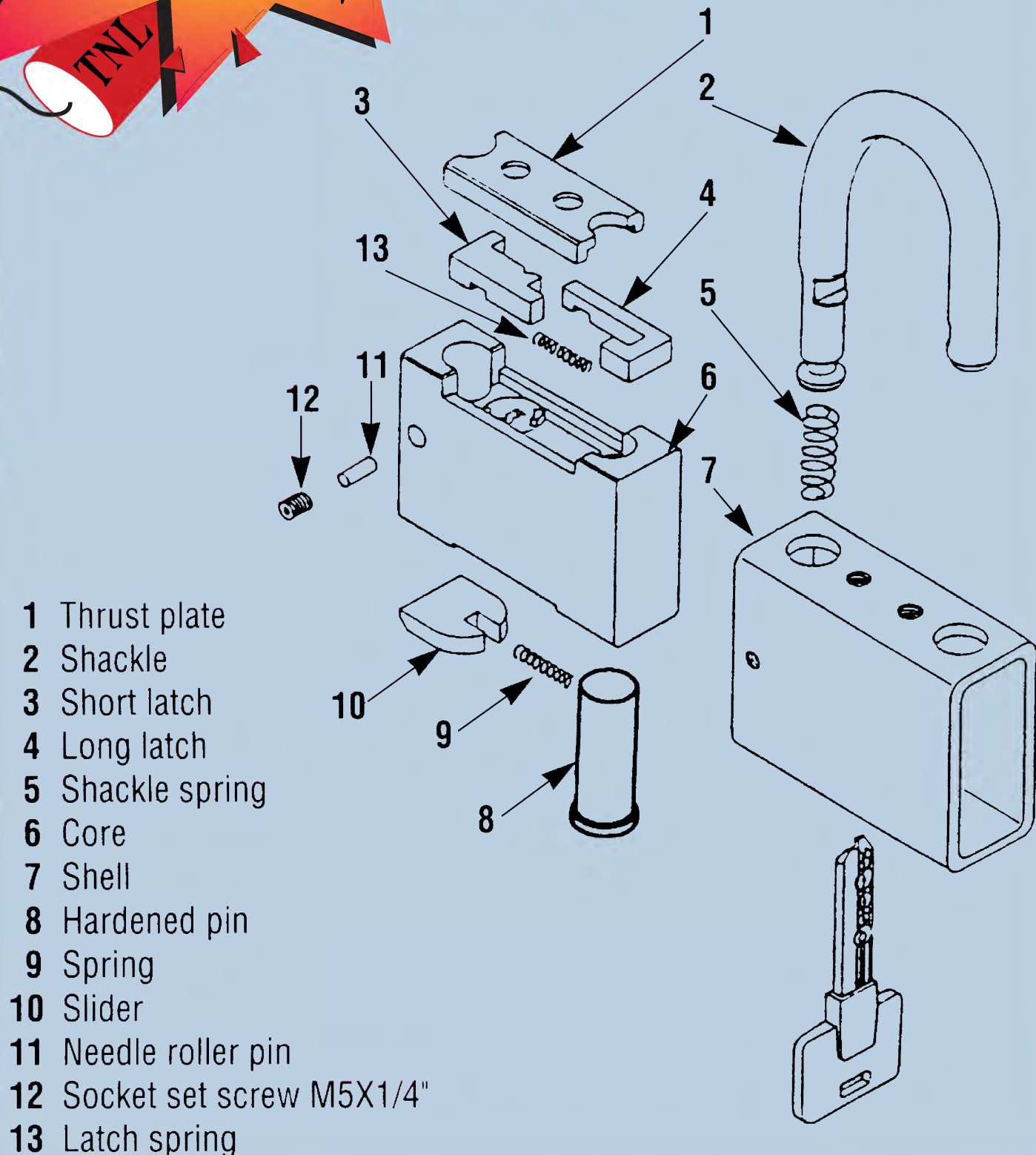


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EXPLODED VIEW

Mul-T-Lock Pop-Open Shackle Padlock



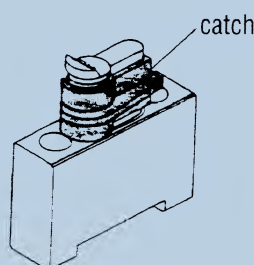
Mul-T-Lock Pop-Open Shackle Padlock

- 1**
 - a. Using a 2.5 mm Allen wrench, remove the set screw (12).
 - b. Remove the needle roller pin (11) and slide out the shackle, remove the key.
 - c. Slide the core out of the shell, making certain to carefully set aside the spring-loaded parts.

- 2**
 - a. Turn the core upside down and pull out the cylinder so that the catch can be mounted.
 - b. Mount the catch.

WARNING:

Do not pull the cylinder out of the core more than 2/3 of the way!!

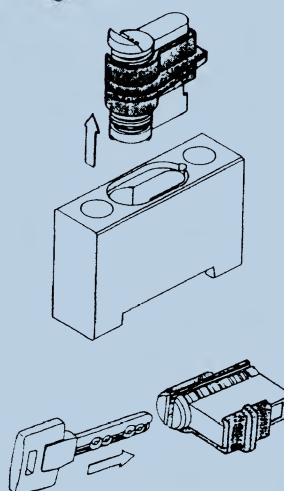


- 3** Remove the cylinder together with the catch.

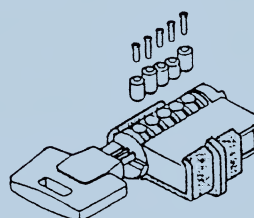
- 4** Insert the key into the cylinder and turn it until the pins can be removed from the plug.

NOTE:

If the catch has not been properly mounted, the pins cannot be removed. If this occurs, reinsert the cylinder into the core and mount the catch in the proper position.



- 5**
 - a. Remove the pins and the key from the plug.
 - b. Insert the new key into the plug and insert the pins to align with the new key, making certain that a proper shear line is obtained.



- 6**
 - a. Insert the cylinder into the core up to the catch.
 - b. Remove the catch and slide the cylinder all the way into the core.
 - c. Make sure that the cylinder operates properly with the new key.
 - d. Remove the key while holding the plug in place.
 - e. Complete reassembly of all lock components and slide the core back into the shell oning properly.
 - h. Make sure that the padlock is functioning properly before inserting the shackle.

TNL

The ~~Lighter~~ Side

"Ah, Youth."



by
**Sara
Probasco**

Sometimes, life around the shop is quiet and a bit dull. There are even days when we feel like the ads of the Maytag repair man. Then there are the other kind.

"There I was, working on the customer's front door lock and minding my own business," Ted said, "when sirens started going off at the detention center, across the street. Guards came pouring out of the compound, looking for a prisoner who had just escaped."

"What did you do,?" I asked.

"I just stepped inside and closed the door," Ted replied. "But when I had finished my work there and was getting ready to come back to the store, you'd better believe, I checked the van ver-r-ry carefully, to be sure nobody was hiding inside."

"The police apprehended the runaway behind some buildings in the next block, later in the day," Ted went on to say. "The man was

unarmed and not considered particularly dangerous, but the concept remained a bit unnerving."

This wasn't the first time Ted had run into a potential confrontation with law-breakers while on the job. A couple of months earlier, while driving a narrow side street on his way back to the store, he had found himself moving along between two pick-up trucks. The one in front slowed, then pulled to the side of the road.

As Ted eased around, he glanced in his rear-view mirror to see the second pick-up pull over, too. Then a half-dozen teenage boys piled out of both vehicles with baseball bats in their hands. When they began swinging at the vehicles and one another, Ted hesitated, then realized there was nothing he could do except get clobbered, so he sped away.

Unfortunately, Ted was driving our older service van at the time — the one with no cellular telephone — so he couldn't immediately notify the police of the fracas. By the time he reached our store and could summon help, it was too late. When police arrived at the scene the boys and their vehicles were long gone, their damage done.

"I need to have my house re-keyed," a friend named George said one morning.

"Did you lose some keys?" I asked.

"No. But I think my teenage son may have. Either that, or somebody had some copies made."

The story he told made the hairs stand up on the back of my neck. While the family was out of town on vacation, a group of teenagers apparently made their empty house headquarters for an ongoing party. Although doors and windows had been carefully locked, somebody got in, and without forced entry. They helped themselves to food and drink in the refrigerator, freezer, and pantry, occupied various beds in the house, dragged sofa and chair cushions onto the floor, and made a general chaotic mess all over the house. Needless to say, they didn't bother to straighten up when they vacated the premises.

"I can scarcely believe what you're saying!" I said.

"We're not the only ones this has happened to," my friend added.

"Do you have any idea who is responsible?"

"We know exactly who did it, we know three of the culprits, for sure. They were bragging about it around school."

"Have you talked to their parents?" I asked.

"No. Two of the boys are from pretty tough families. Frankly, I'm a little hesitant to confront their fathers for fear of personal retaliation," George admitted.

"What about going to the police?"

"I talked to them about it, but they say they can't do anything, because we have no proof. They need somebody who was there to come forward and name names, or a witness willing to testify they saw certain kids coming or going. The kids bragging at school is just hearsay, they tell me. It could be just kids trying to act cool by making up a tale. At any rate, it would never stand up in court."



When Don returned from re-keying George's house, we were talking about the events of the day.

"So many negative things seem to be happening with the young people, these days," I lamented. "And not just with the youngsters. There's more and more bad stuff going down, all around."

"Aw, it depends on your perspective. As I see it, just as many things are going up," Don replied.

"Yeah? Like what?"

"Temper, the price of cars, escalators. Speaking of which, did I tell you about the girl in San Antonio that got caught in one?"

"Caught in an escalator? You're kidding," I said. "How could anybody get caught in an escalator?"

"One of the locksmiths was talking about it at that meeting Keith and I went to, last month. A teenage girl had on athletic shoes with the laces untied. Apparently, she was in a hurry. She stepped onto a crowded escalator and was making her way up the steps to the top. Just as she was about to step off, one of her shoe laces followed the top step up under the metal plate and caught, pulling her foot out from under her. She fell flat."

"How awful," I said.

"The bad thing was, all the people behind her on the escalator didn't have anywhere to go but up. The escalator was gobbling the girl's shoe lace, pulling the shoe tighter and tighter, she had fallen on the floor and couldn't get her shoe loose from the escalator or her foot out of her shoe, and all the people behind her were stepping on her and each other, trying to get over her and out of each other's way. They were falling down, screaming and shouting as the escalator dumped more and more people onto the pile on top of her."

"Didn't anybody have a pocket knife?" I asked. "Looks like they could have cut the shoelace."

"Apparently, her foot was in too close and turned over, where they couldn't get to it. I understand they tried. Then somebody offered to cut the side of the shoe, to free her, but she started screaming bloody murder, said she wasn't about to let them carve up her new hundred dollar shoes."

"Why didn't somebody just stop the escalator?"

"They finally did, from the main switch box. The thing was, an emergency stop switch was behind a locked metal plate on the outside of the hand rail, at the top, but nobody seemed to know where the key was. Security said that in all the years the store had been there, nobody had ever needed to stop the escalator in a hurry," Don said, shaking his head. "You can believe they called the locksmith and got a set of keys made right away. I imagine they'll have a law-suit on their hands,

before all is said and done."

"Well, part of the blame has to be on the girl, for not tying her shoe laces together, in the first place."

"Maybe, but businesses are always the bad guys, whenever it comes to something like this," Don reminded me. "Besides, she was in a hurry," he added with a chuckle.

"And you remember the old saying about shoe laces: You don't tie them together and try to run races." **TNL**



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BUSINESS BRIEFS

TESA's New President

TESA entry systems appointed Robert Aquilino to the position of President of TESA Worldwide. Bob's role will include directing the efforts of the company on a global basis.



**Robert
Aquilino**

Curtis PC+Patent

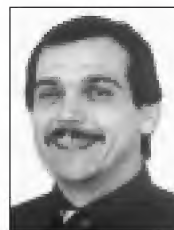
Axxess Technologies, Inc. Tempe, Arizona and Curtis Industries, Inc. Mayfield Heights, Ohio announce the award of a patent for their PC+Computerized Automotive Key Code Cutter/Duplicator. This patent, in conjunction with two earlier patents gives unique protection to the technologies Axxess employs in the PC+ computerized key cutting machine capable of cutting to code and duplicating key blanks.

Fort Announces New President

Fort Lock Corporation is pleased to announce the promotion of Jay Fine to president. Lloyd Falk remains with the company as Chairman of the Board. Jay joined Fort Lock as the controller, and has most recently been the vice-president.

Two Security Lock Appointments

Elliot Bender has been appointed customer service representative at Security's



Phillip Pante



Elliot Bender

new Las Vegas facility.

Certified Registered Locksmith, Phillip Pante, also joins Security's customer service team.

For additional information contact Security Lock Distributors, Inc. at: Phone: 800-847-5625, Fax: 800-878-6400; e-mail: SECLOCK@IX.NETCOM.COM . web: <http://www.seclock.com>.

Gil-Ray Tools Offers New Price Savings

Gil-Ray Tools has implemented a new policy for discount prices on cutter sharpening. Every time a new Gil-Ray cutter is purchased they will extend a 5% discount to their next sharpening order received



within 30 days.

For more information call 517-892-6870 or e-mail djdeuel@concentric.net

Campbell Named Director Of Marketing

Winner International, marketers of The Club vehicle anti-theft device, named Tyler Campbell as their director of marketing. Campbell will be responsible for marketing and promotions for The Club family of safety and security products worldwide.

Lares Technology and Corby Industries Partnership

Lares Technology, Inc. announced that it has entered into agreement with Corby Industries, to develop Windows based Access Control Software in support of Corby's System 2 for Windows. This will be the first in a line of cooperative projects between Lares Technology and Corby Industries.

Lares Technology Inc. Web page:

<http://www.lares.com>

Corby Industries Inc. Web page: <http://www.corby.com>
ISC Expo Receives ILA Endorsement

The International Security Conference & Exposition (ISC EXPO) has received the endorsement of the Institutional Locksmith's Association (ILA) for all three of its events to be held in 1998. The agreement between the two organizations will also include a joint effort to produce a symposium geared towards institutional (in-house) locksmiths and end-users.

Visit the ISC website at: <http://isc.reedexpo.com>.

E-mail: inquiry@isc.reedexpo.com. Phone: 203-840-5602.

Streamlight Promotion

Streamlight Inc. has announced the promotion of Peggy Wright to Customer Service Manager. Wright will oversee Streamlight's inside sales department and serve as a liaison between their Field Sales Directors and corporate offices.



Peggy Wright

DEL TREX Door Controls, LLC

Irving Saphirstein, recognized as the inventor of the electromagnetic lock, announces the formation of his new company, DEL TREX Door Controls, LLC.

DEL TREX designs and manufactures innovative and reliable door control systems, offering a complete line of user-friendly electromagnetic locks, power supplies, push plate controls and exit releases.

Contact DEL TREX Door Controls, LLC at: 860-233-8201, fax 860-233-8224.

Lockmasters Carrying Lab Pin Kits

Lockmasters is proud to announce the addition of LAB universal pinning systems to their product line. Select from Universal Pins, Original Manufacturers Pins, Original Pinning Kits, Semi-Pro Series Kits, Mini Dur-x Kits, Original 3-in-1 Auto Kit, Interchangeable Core Kit and more! Purchase 144 LAB pins in a vial for only \$1.15. Call Lockmasters at 1-800-654-0637 for your free Tool and Equipment Catalog featuring the added line of LAB Pin Kits and Accessories.

Master Lock Crime Prevention Message

Master Lock Company was honored by the National Crime Prevention Council (NCPC) for their continuing partnership in bringing crime prevention awareness messages to communities across the country.

David Campbell, President and CEO of Master Lock, received the award from John Calhoun, Executive Director of the National Crime Prevention Council.

Fortune Brands Selling Door Hardware

Fortune Brands, Inc. (NYSE-FO), the international consumer products company, announced today that its Master Lock unit has reached an agreement to sell door hardware assets to Ingersoll-Rand's Schlage Lock business unit. The sale, which did not include the "Master" trademark, will focus Master Locks' financial and management resources on the padlock category, where the Master Lock brand is number one worldwide.





KEY CODES

Nissan Quest 0001X-1706X

Keyblanks

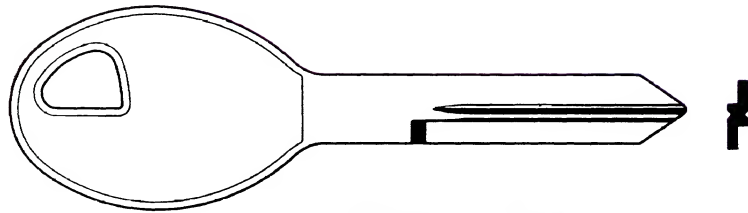
llo: X242
 llo EZ: DA37
 Silca: NSN16R
 Jet: DA37PH

HPC 1200 Code Card

CX101, PX101

Framon

Cuts Start at: 405
 Spacing: .092
 Block: 3
 Cut to Cut Spacing: .092
 Number of Cuts: 8
 Gauged: Tip to Bow
 Notes: Lay spacing clip flat on left side of vice.



Spacing

1 - 845
 2 - 753
 3 - 661
 4 - 569
 5 - 477
 6 - 385
 7 - 293
 8 - 254

Depths

1 = .354
 2 = .329
 3 = .304
 4 = .279
 5 = .254

01	13212112	38	35331212	75	12112312	112	35535312	149	12111322	186	35354322
02	12312112	39	13531212	76	11212312	113	13245312	150	11211322	187	24454322
03	35312112	40	13112212	77	24312312	114	12345312	151	24311322	188	13554322
04	13122112	41	11312212	78	11122312	115	35445312	152	11121322	189	13235322
05	11322112	42	11132212	79	13322312	116	24545312	153	13321322	190	12335322
06	24422112	43	35532212	80	13232312	117	11355312	154	13231322	191	35435322
07	12132112	44	24442212	81	12332312	118	35355312	155	12331322	192	24535322
08	11232112	45	12113212	82	11342312	119	24455312	156	13312322	193	11345322
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26	11353112	63	13444212	100	24334312	137	13133222	174	24553322	211	12433422
27	35353112	64	13354212	101	13434312	138	24433222	175	24324322	212	35533422
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33	11321212	70	24321312	107	35454312	144	13434222	181	13244322	218	35353422
34	24421212	71	13421312	108	24554312	145	13344222	182	12344322	219	24453422
35	12131212	72	24231312	109	11135312	146	35544222	183	35444322	220	13553422
36	11231212	73	12431312	110	24235312	147	35454222	184	24544322	221	11124422
37	13331212	74	35531312	111	12435312	148	24554222	185	11354322	222	13324422



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Nissan Quest 0001X-1706X

223	13234422	288	11323232	353	12432432	418	11331242
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242	32211132	307	24544232	372	13453432	437	24453242
243	24211132	308	11354232	373	35424432	438	13553242
244	12121132	309	35354232	374	35334432	439	13324242
245	21221132	310	24454232	375	13534432	440	13234242
246	12421132	311	13554232	376	21244432	441	12334242
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248	24231132	313	13221332	378	12454432	443	24534242
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250	11212132	315	12231332	380	12235432	445	35344242
251	21122132	316	24431332	381	24335432	446	13544242
252	13322132	317	13212332	382	13435432	447	24354242
253	35322132	318	12312332	383	24245432	448	13454242
254	13232132	319	13122332	384	12445432	449	13211342
255	12332132	320	21322332	385	35545432	450	12311342
256	13532132	321	24422332	386	12355432	451	13121342
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262	12233132	327	24543332	392	11123532	457	13431342
263	24433132	328	24453332	393	35423532	458	13112342
264	11243132	329	12124332	394	24433532	459	11312342
265	24343132	330	21224332	395	11243532	460	24322342
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267	12453132	332	12424332	397	13443532	462	21132342
268	35553132	333	35434332	398	12453532	463	24232342
269	32111232	334	24534332	399	13224532	464	12432342
270	21211232	335	32244332	400	12324532	465	13242342
271	21121232	336	21344332	401	35324532	466	12342342
272	13321232	337	35344332	402	24424532	467	35442342
273	35321232	338	13544332	403	13134532	468	24542342
274	13231232	339	24354332	404	12234532	469	32213342
275	12331232	340	13454332	405	11334532	470	24313342
276	13531232	341	24435332	406	35544532	471	32123342
277	35531232	342	11245332	407	12354532	472	31223342
278	13312232	343	24345332	408	35454532	473	24223342
279	35312232	344	13445332	409	24554532	474	12423342
280	13132232	345	12455332	410	11135532	475	35433342
281	21332232	346	13112432	411	13345532	476	24533342
282	24342232	347	11312432	412	35445532	477	32243342
283	13442232	348	35312432	413	24545532	478	21343342
284	21113232	349	24322432	414	11355532	479	35343342
285	13213232	350	13422432	415	13311242	480	13543342
286	12313232	351	11132432	416	35311242	481	24353342
287	13123232	352	24232432	417	13131242	482	13453342



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483	21124342	513	13533442	543	13124542	573	12243113	603	13124213	633	12443313
484	35424342	514	21243442	544	11324542	574	11343113	604	11324213	634	35543313
485	35334342	515	13353442	545	12134542	575	24353113	605	35324213	635	35453313
486	13534342	516	12453442	546	21234542	576	13453113	606	24424213	636	24553313
487	21244342	517	35553442	547	24334542	577	12211213	607	12134213	637	12124313
488	13354342	518	43224442	548	13434542	578	12121213	608	11234213	638	11224313
489	12454342	519	32324442	549	35534542	579	11221213	609	24334213	639	24324313
490	35554342	520	35324442	550	43344542	580	24321213	610	13434213	640	13424313
491	13135342	521	13134442	551	11354542	581	13421213	611	24244213	641	11134313
492	12235342	522	42234442	552	35354542	582	24231213	612	13344213	642	24234313
493	11335342	523	31334442	553	13554542	583	12431213	613	12444213	643	12434313
494	24335342	524	32354442	554	24235542	584	35531213	614	35544213	644	35534313
495	13435342	525	12135442	555	43335542	585	12112213	615	12354213	645	13244313
496	35545342	526	21235442	556	12435542	586	11212213	616	35454213	646	12344313
497	12355342	527	35535442	557	13245542	587	24312213	617	24554213	647	35444313
498	35455342	528	43345442	558	32345542	588	13322213	618	24311313	648	24544313
499	24555342	529	21355442	559	54455542	589	13232213	619	24221313	649	11354313
500	31112442	530	35355442	560	12212113	590	12332213	620	12421313	650	35354313
501	24312442	531	43555442	561	12122113	591	11342213	621	24212313	651	24454313
502	43322442	532	13313542	562	24322113	592	24213213	622	13222313	652	13554313
503	13232442	533	13223542	563	13422113	593	13223213	623	12322313	653	35435313
504	32332442	534	12323542	564	24232113	594	12323213	624	35422313	654	24535313
505	35432442	535	35323542	565	12432113	595	35423213	625	12232313	655	12245313
506	24532442	536	13133542	566	35532113	596	12233213	626	24432313	656	11345313
507	11342442	537	32233542	567	13242113	597	24433213	627	11242313	657	35345313
508	35342442	538	21333542	568	12342113	598	11243213	628	24342313	658	24445313
509	13542442	539	35543542	569	24442113	599	24343213	629	13442313	659	13545313
510	24213442	540	12353542	570	24313113	600	13443213	630	12223313	660	24355313
511	35423442	541	35453542	571	24223113	601	12453213	631	24423313	661	13455313
512	35333442	542	24553542	572	12423113	602	35553213	632	24243313	662	12112123



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663	11212123	693	24324223	723	35542323	753	12432423	782	24335423	811	35434233
664	24312123	694	13424223	724	12213323	754	35532423	783	13435423	812	24534233
665	13322123	695	11134223	725	12123323	755	13242423	784	24245423	813	12244233
666	13232123	696	24234223	726	35443323	756	12342423	785	13345423	814	11344233
667	12332123	697	12434223	727	24543323	757	35442423	786	12445423	815	35344233
668	11342123	698	35534223	728	24453323	758	24542423	787	35545423	816	13544233
669	24213123	699	13244223	729	11124323	759	24313423	788	12355423	817	24354233
670	13223123	700	12344223	730	24224323	760	11223423	789	35455423	818	13454233
671	12323123	701	35444223	731	12424323	761	24223423	790	24555423	819	35424333
672	35423123	702	24544223	732	35434323	762	12423423	791	13222133	820	12454333
673	12233123	703	11354223	733	24534323	763	35433423	792	12322133	821	35554333
674	24433123	704	35354223	734	12244323	764	24533423	793	12232133	822	24245333
675	11243123	705	24454223	735	11344323	765	12243423	794	11242133	823	12445333
676	24343123	706	13554223	736	35344323	766	11343423	795	24342133	824	35545333
677	13443123	707	24211323	737	13544323	767	35343423	796	13442133	825	35455333
678	12453123	708	13221323	738	24354323	768	13543423	797	12223133	826	24555333
679	35553123	709	12321323	739	13454323	769	24353423	798	24423133	827	12212433
680	13213223	710	35421323	740	12235323	770	13453423	799	24243133	828	24312433
681	12313223	711	12231323	741	24435323	771	13224423	800	12443133	829	12122433
682	13123223	712	24431323	742	11245323	772	35424423	801	35543133	830	24222433
683	11323223	713	13212323	743	24345323	773	13134423	802	35453133	831	12422433
684	35323223	714	12312323	744	13445323	774	35334423	803	24553133	832	35432433
685	24423223	715	13122323	745	12455323	775	13534423	804	35443233	833	24532433
686	12133223	716	11322323	746	13112423	776	11244423	805	24543233	834	12242433
687	24243223	717	35322323	747	11312423	777	13354423	806	24453233	835	11342433
688	12443223	718	24422323	748	35312423	778	12454423	807	12124233	836	35342433
689	35543223	719	12132323	749	24322423	779	35554423	808	11224233	837	13542433
690	12353223	720	11232323	750	13422423	780	12135423	809	24224233	838	12113433
691	35453223	721	24242323	751	11132423	781	11235423	810	12424233		
692	24553223	722	12442323	752	24232423						

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839	11213433	852	24235433	865	35453533	878	13554533	891	24331243	956	35544343
840	24213433	853	35535433	866	24553533	879	12435533	892	13431243	957	12354343
841	35423433	854	35445433	867	13124533	880	35435533	893	13112243	958	35454343
842	11243433	855	24545433	868	12224533	881	24535533	894	11312243	959	24554343
843	12453433	856	11355433	869	11324533	882	13245533	895	24322243	960	12135343
844	35553433	857	35355433	870	12134533	883	12345533	896	13422243	961	11235343
845	12324433	858	24455433	871	11234533	884	35345533	897	21132243	962	35535343
846	35324433	859	13555433	872	35534533	885	13211243	898	24232243	963	35445343
847	35544433	860	11113533	873	35444533	886	12311243	899	12432243	964	24545343
848	12354433	861	24423533	874	24544533	887	13121243	900	13242243	965	11355343
849	35454433	862	24243533	875	11354533	888	11321243	901	12342243	966	35355343
850	24554433	863	12443533	876	35354533	889	12131243	902	35442243	967	24455343
851	11135433	864	35543533	877	24454533	890	11231243	903	24542243	968	13555343

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904	12213243	976	35544343
905	24313243	977	12354343
906	12123243	978	35454343
907	21223243	979	24554343
908	24223243	980	12135343
909	12423243	981	11235343
910	35433243	982	35535343
911	24533243	983	35445343
912	12243243	984	24545343
913	11343243	985	13555343
914	35343243	986	24212443
915	13543243	987	35422443
916	24353243	988	21332443
917	13453243	989	35332443
918	11124243	990	13532443
919	35424243	991	43223443
920	35334243	992	32323443
921	13534243	993	35323443
922	11244243	994	35543443
923	13354243	995	12353443
924	12454243	996	35453443
925	35554243	997	24553443
926	13111343	998	13124443
927	32211343	999	21324443
928	11311343	1000	32134443
929	12121343	1001	35534443
930	21221343	1002	21354443
931	24321343	1003	12313543
932	13421343	1004	35313543
933	11131343	1005	13123543
934	24231343	1006	32223543
935	12431343	1007	32345443
936	24312343	1008	35345443
937	24222343	1009	13213543
938	12422343	1010	12313543
939	35432343	1011	35313543
940	24532343	1012	13123543
941	12242343	1013	32223543
942	11342343	1014	11323543
943	35342343	1015	32233543
944	13542343	1016	11323543
945	32113343	1017	12124543
946	21213343	1018	21224543
947	24213343	1019	24324543
948	35423343	1020	13424543
949	21243343		21134543
950	12453343		24234543
951	35553343		12434543
952	13224343		13244543
953	12324343		32344543
954	35324343		13235543
955	32234343		32335543



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1021	32245543	1086	31133453	1151	13123124	1163	24553124	1175	24543224	1187	13544224
1022	21345543	1087	35533453	1152	11323124	1164	13113224	1116	11353224	1188	24354224
1023	13545543	1088	13243453	1153	35323124	1165	11313224	1117	35353224	1189	13454224
1024	24355543	1089	32343453	1154	24423124	1166	35313224	1178	24453224	1190	12111324
1025	43455543	1090	35443453	1155	24333124	1167	24323224	1179	13553224	1191	11211324
1026	32111353	1091	24543453	1156	13433124	1168	13423224	1180	13324224	1192	13311324
1027	21211353	1092	11353453	1157	24243124	1169	24233224	1181	13234224	1193	11121324
1028	24311353	1093	35353453	1158	13343124	1170	12433224	1182	12334224	1194	35321324
1029	21121353	1094	24453453	1159	12443124	1171	35533224	1183	35434224	1195	13131324
1030	24221353	1095	13553453	1160	35543124	1172	13243224	1184	24534224	1196	11331324
1031	12421353	1096	32124453	1161	12343124	1173	12343224	1185	11344224	1197	24331324
1032	35431353	1097	31224453	1162	35453124	1174	35443224	1186	35344224	1198	13431324
1033	24531353	1098	24324453								
1034	24212353	1099	13424453								
1035	43222353	1100	24234453								
1036	32322353	1101	32434453								
1037	35422353	1102	24354453								
1038	32232353	1103	43454453								
1039	24432353	1104	13235453								
1040	11242353	1105	32335453								
1041	24342353	1106	32245453								
1042	13442353	1107	21345453								
1043	31113353	1108	13545453								
1044	24423353	1109	31113553								
1045	24243353	1110	13113553								
1046	32443353	1111	11313553								
1047	35543353	1112	24323553								
1048	35453353	1113	13423553								
1049	24553353	1114	24233553								
1050	13124353	1115	32433553								
1051	32224353	1116	54443553								
1052	11324353	1117	24353553								
1053	12134353	1118	13453553								
1054	21234353	1119	24224553								
1055	35534353	1120	43324553								
1056	35444353	1121	12424553								
1057	24544353	1122	43234553								
1058	11354353	1123	42334553								
1059	35354353	1124	35434553								
1060	24454353	1125	24534553								
1061	13554353	1126	42244553								
1062	11135353	1127	31344553								
1063	24235353	1128	35344553								
1064	12435353	1129	43544553								
1065	35435353	1130	13135553								
1066	24535353	1131	42235553								
1067	13245353	1132	31335553								
1068	12345353	1133	54435553								
1069	24445353	1134	31245553								
1070	13212453	1135	54345553								
1071	12312453	1136	53445553								
1072	13122453	1137	24212124								
1073	21322453	1138	13312124								
1074	35322453	1139	35422124								
1075	24422453	1140	11132124								
1076	12132453	1141	13132124								
1077	21232453	1142	11332124								
1078	24332453	1143	35332124								
1079	13432453	1144	24432124								
1080	24242453	1145	13532124								
1081	13342453	1146	24342124								
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1083	35542453	1148	13213124								
1084	35313453	1149	12313124								
1085	42223453	1150	11123124								

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1199	35312324	1263	35535424	1327	13245334	1391	13533244
1200	35532324	1264	13245424	1328	12345334	1392	11243244
1201	13342324	1265	12345424	1329	35445334	1393	13353244
1202	35442324	1266	11355424	1330	24545334	1394	12453244
1203	24542324	1267	35355424	1331	11355334	1395	35553244
1204	12113324	1268	13555424	1332	35355334	1396	13224244
1205	11213324	1269	13212134	1333	24455334	1397	12324244
1206	24313324	1270	12312134	1334	13555334	1398	35324244
1207	24223324	1271	13122134	1335	24212434	1399	13134244
1208	12423324	1272	11322134	1336	13322434	1400	12234244
1209	35433324	1273	35322134	1337	35422434	1401	11334244
1210	24533324	1274	24422134	1338	13232434	1402	12354244
1211	12243324	1275	24332134	1339	12332434	1403	13124344
1212	11343324	1276	13432134	1340	35332434	1404	11324344
1213	35343324	1277	24242134	1341	13532434	1405	12134344
1214	13543324	1278	13342134	1342	11242434	1406	35534344
1215	13224324	1279	12442134	1343	12323434	1407	11354344
1216	12324324	1280	35542134	1344	35323434	1408	35354344
1217	35424324	1281	13113134	1345	35543434	1409	13554344
1218	13134324	1282	12213134	1346	12353434	1410	35435344
1219	12234324	1283	11313134	1347	35453434	1411	24535344
1220	11334324	1284	35313134	1348	24553434	1412	35345344
1221	35334324	1285	24323134	1349	11324434	1413	13545344
1222	13534324	1286	13423134	1350	35534434	1414	24355344
1223	11244324	1287	24233134	1351	11354434	1415	13455344
1224	13354324	1288	12433134	1352	35354434	1416	35335444
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1226	35554324	1290	13243134	1354	13235434	1418	12213544
1227	12135324	1291	12343134	1355	35435434	1419	11313544
1228	11235324	1292	35443134	1356	24535434	1420	12123544
1229	24335324	1293	24543134	1357	12245434	1421	24323544
1230	13435324	1294	11353134	1358	11345434	1422	13423544
1231	24245324	1295	35353134	1359	35345434	1423	24233544
1232	13345324	1296	24453134	1360	13545434	1424	12433544
1233	12445324	1297	13553134	1361	24355434	1425	13243544
1234	35545324	1298	12113234	1362	13455434	1426	12343544
1235	12355324	1299	11213234	1363	13213534	1427	13324544
1236	35455324	1300	24313234	1364	12313534	1428	13234544
1237	24555324	1301	24223234	1365	35313534	1429	13135544
1238	11112424	1302	12423234	1366	13123534	1430	13535544
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1240	35432424	1304	24533234	1368	11323534	1432	13311354
1241	24532424	1305	12243234	1369	11133534	1433	13221354
1242	35342424	1306	11343234	1370	35533534	1434	12321354
1243	13542424	1307	35343234	1371	35443534	1435	35421354
1244	24213424	1308	13543234	1372	24543534	1436	13131354
1245	13313424	1309	24353234	1373	11353534	1437	12231354
1246	13223424	1310	13453234	1374	35353534	1438	11331354
1247	35423424	1311	35424234	1375	24453534	1439	35331354
1248	13133424	1312	35334234	1376	13553534	1440	24431354
1249	12333424	1313	13534234	1377	12124534	1441	13531354
1250	35333424	1314	11244234	1378	11224534	1442	13212354
1251	13533424	1315	13354234	1379	24324534	1443	12312354
1252	11243424	1316	12454234	1380	13424534	1444	13122354
1253	12453424	1317	35554234	1381	24234534	1445	21322354
1254	35553424	1318	35324334	1382	12434534	1446	35322354
1255	13124424	1319	35544334	1383	13244534	1447	24422354
1256	35324424	1320	12354334	1384	12344534	1448	12132354
1257	12134424	1321	35454334	1385	12335534	1449	21232354
1258	12354424	1322	24554334	1386	24213244	1450	24332354
1259	11135424	1323	11135334	1387	13323244	1451	13432354
1260	24235424	1324	24235334	1388	35423244	1452	24242354
1261	13335424	1325	12435334	1389	13233244		
1262	12435424	1326	35535334	1390	35333244		

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1453	13342354	1517	35424554	1581	11354335	1645	12443245
1454	12442354	1518	13134554	1582	35354335	1646	35543245
1455	35542354	1519	35334554	1583	24454335	1647	12353245
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1457	32433354	1521	43354554	1585	35435335	1649	24553245
1458	35533354	1522	32454554	1586	24535335	1650	35534245
1459	32343354	1523	32135554	1587	12245335	1651	11354245
1460	35443354	1524	54335554	1588	11345335	1652	35354245
1461	24543354	1525	43435554	1589	35345335	1653	13554245
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1464	24453354	1528	11212135	1592	24355335	1656	35344345
1465	13553354	1529	35312135	1593	13455335	1657	13544345
1466	12124354	1530	24322135	1594	13112435	1658	24354345
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1468	24324354	1532	12232135	1596	11312435	1660	13235345
1469	13424354	1533	24232135	1597	12122435	1661	12335345
1470	21134354	1534	12432135	1598	35322435	1662	35335345
1471	24234354	1535	35532135	1599	11132435	1663	24435345
1472	13244354	1536	11242135	1600	11332435	1664	13535345
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1480	32212454	1544	35433135	1608	11353435	1672	12423545
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1512	43323554	1576	12434335	1640	13213245	1704	24335455
1513	12423554	1577	35534335	1641	12313245	1705	13435455
1514	43233554	1578	13244335	1642	13123245	1706	24245455
1515	43224554	1579	35444335	1643	11323245		
1516	32324554	1580	24544335	1644	35323245		

TEL

The National Locksmith's

April 1998 Planning Calendar

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1	2	3 Lockmasters Simplex Certification Nicholasville, KY (800) 654-0637	4 Lockmasters Simplex Certification Nicholasville, KY
5 Palm Sunday	6 Lockmasters Professional Locksmithing Course Nicholasville, KY (800) 654-0637	7 Lockmasters Professional Locksmithing Course Nicholasville, KY	8 Lockmasters Professional Locksmithing Course Nicholasville, KY	9 Lockmasters Professional Locksmithing Course Nicholasville, KY	10 Lockmasters Professional Locksmithing Course Nicholasville, KY	11 Lockmasters Professional Locksmithing Course Nicholasville, KY
12 Easter Lockmasters Professional Locksmithing Course Push Button Manipulation Nicholasville, KY (800) 654-0637	13 Lockmasters Professional Locksmithing Course Nicholasville, KY	14 Lockmasters Professional Locksmithing Course Nicholasville, KY	15 Lockmasters Professional Locksmithing Course Nicholasville, KY	16 Lockmasters Professional Locksmithing Course Nicholasville, KY	17 Lockmasters Professional Locksmithing Course Nicholasville, KY	18 Bill Reed Seminar Denver, CO (888) 801-2003 MBA Training - Defeating Dimple Key Locks Nicholasville, KY (606) 887-0496
19 MBA Training - Defeating Dimple Key Locks Nicholasville, KY The Yankee Bargain Hunter Massachusetts (800) 209-8266	20 Lockmasters 5 Day GSA Training Fundamentals of Electricity Nicholasville, KY (800) 654-0637	21 Lockmasters 5 Day GSA Training Fundamentals of Electricity Nicholasville, KY	22 Lockmasters 5 Day GSA Training Fundamentals of Electricity Nicholasville, KY	23 Lockmasters 5 Day GSA Training Fundamentals of Electricity Nicholasville, KY	24 Lockmasters 5 Day GSA Training Fundamentals of Electricity Nicholasville, KY	25 Marysville Educational Weekend & Swapmeet Marysville, KS (785) 562-3494
26 South Jersey Locksmiths Assoc. 1st Annual Swap Show Mount Laurel, NJ (609) 767-4977	27 Lockmasters 3 Day GSA Red Label Course Electronic Access Control Nicholasville, KY (800) 654-0637	28 Lockmasters 3 Day GSA Red Label Course Electronic Access Control Nicholasville, KY	29 Lockmasters 3 Day GSA Red Label Course Electronic Access Control Nicholasville, KY	30 Lockmasters Electronic Access Control through May 1 Push Button Manipulation Nicholasville, KY (800) 654-0637		

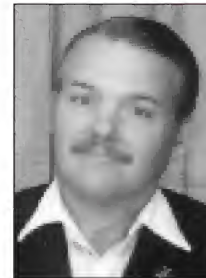


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BEGINNER'S CORNER

Schlage B-Series Commercial Grade Deadbolt



by
**Jim
Langston**



1. The B600-Series meets all ANSI 156.5 Grade 1 requirements, with security and strength features.

Schlage's B600, B700, and B800-Series are the new industry-leading deadbolts. Built to withstand the demands of the toughest commercial applications, this series is also recommended for residential use. The B600-Series meets all ANSI 156.5 Grade 1 requirements, with security and strength features (see Photograph 1). These features include solid brass trim rings, 14" (6mm) diameter through-bolts and a high-strength, solid steel

alloy deadbolt. All products also feature Schlage's exclusive wood frame reinforcer.

The B700 and B800-Series combine all the features of the B600-Series commercial deadbolt with Schlage's High Security Primus, cylinders. In addition to strength and durability, the B700-Series offers key control and pick resistance. The B800-Series combines all these features plus drill resistance.

Specifications

Applications: Extra heavy-duty B600-Series construction for commercial, institutional and industrial uses. They are also suitable for all residential uses and are available for high-security applications.

Certifications

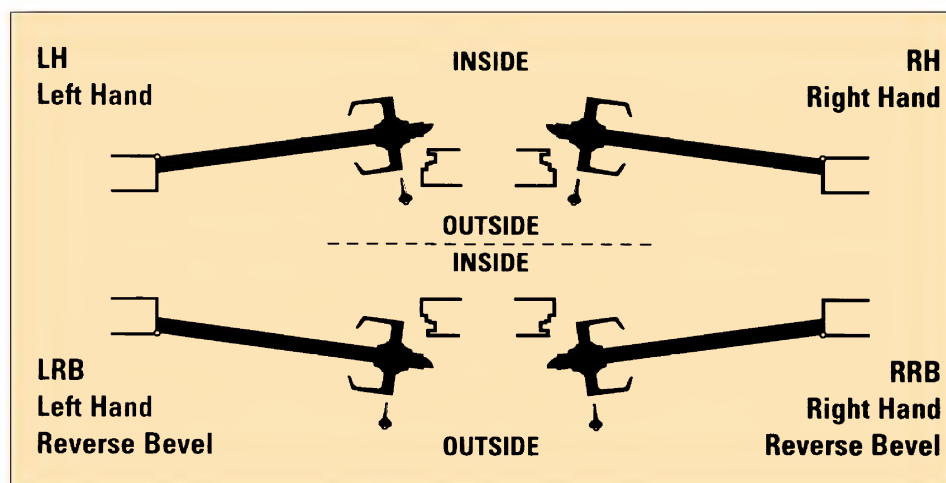
ANSI A156.5-1992 Grade 1. UL Listed fire rated auxiliary lock. The B800-Series meets UL437 high-security standards.

Exposed Trim

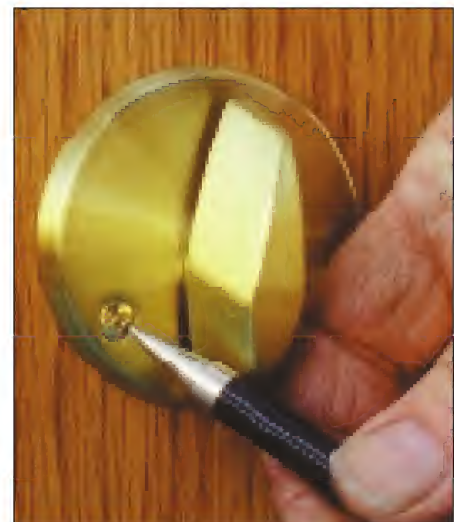
The trim rings are solid brass or bronze, finished or plated to match finish symbols. The cylinder housings, trim, bolt faceplates, and strikes are wrought brass or bronze.



2. All the parts for both the single cylinder and the double cylinder locks.



A. The cutaway view shows how the parts fit together.



3. The thumb-turn plate is attached to the steel mounting plate with two screws.

Keying

6 Pin tumbler with two nickel silver keys per lock. Stock locks are keyed 5 pin. Keying options include masterkeying, construction keying and interchangeable core. The B700-Series includes Primus, 20-500 Series High Security cylinder.

Door Range

1-3/4" to 2" (44mm-51mm) standard. Available for doors over 2" to 2-1/2" (51mm-64mm) and for 1-3/8" (35mm) doors. Backset: 2-3/8" (60mm)



4. The screw holes in the mounting plate are raised so that the screws do not screw into the door.

standard or 2-3/4" (70mm), 3-3/4" (95mm), or 5" (127mm) optional.

Finishes

- 605 Bright Brass
- 606 Satin Brass
- 609 Satin Brass, Blackened
- 612 Satin Bronze
- 613 Oil Rubbed Bronze
- 625 Bright Chromium Plated
- 626 Satin Chromium Plated

All the locks in these series come in all the finishes.



5. The solid brass or bronze trim ring surrounds the cylinder and resists wrenching and prying.

Designs

B660 Heavy Duty Single Cylinder is the standard unit. Either an outside key or an inside thumb-turn can throw or retract the deadbolt. The bolt automatically deadlocks when fully thrown.

B662 Heavy Duty Double Cylinder is the double cylinder version of the B600-Series deadbolt. A key from either side throws or retracts the deadbolt. The bolt automatically deadlocks when fully thrown. Caution: Double cylinder locks on doors that are used for exits are a safety hazard in times of emergency. Schlage does not recommend double cylinder locks in these situations. Installation should follow existing codes only.

B680 Door Bolt has an inside thumb-turn which throws or retracts it. There is no cylinder or trim on the outside.



STRATTEC™

***The world's largest producer of
automotive locks and keys.***

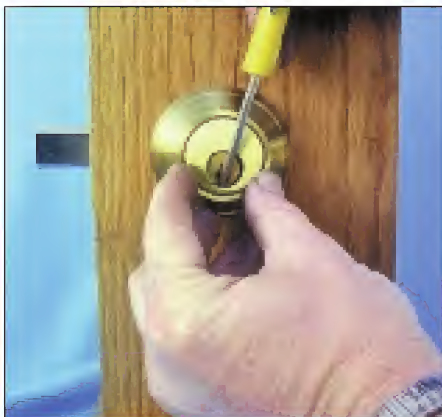
[Click here for more information](#)



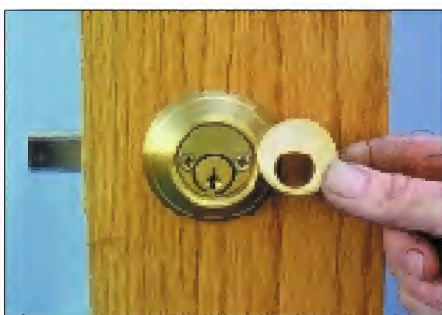
6. The metal shield insert fits over the bolt in the door and protects it from attack through the door.



7. Both inside and outside cylinders look the same, there are no screws showing.



8. To remove the cover plate, put a screw driver at the bottom of the keyway and pry out.



9. The cover plate will pop out and reveal the screws.

B760 Extra Heavy Duty Single Cylinder offers all the features of the B660 with the additional value of a Primus, Controlled Access cylinder. The Primus cylinder offers key control and pick resistance.

B860 Extra Heavy Duty, High-Security Single Cylinder with the same extra heavy duty features of the B760 model, the Primus, High Security cylinder in the B860 has the added feature of being drill resistant.

Photograph 2, shows all the parts for both the single cylinder and the double cylinder locks. The cutaway view shows how the parts fit together (see Illustration A). The thumb-turn plate is attached to the steel mounting plate with two screws as pointed out in Photograph 3. Notice in Photograph 4, that the screw holes in the mounting plate are raised so that the screws do not screw into the door.

The solid brass or bronze trim ring surrounds the cylinder and resists wrenching and prying of the cylinder unit (see Photograph 5).

The metal shield insert fits over the bolt in the door and protects it from attack through the door (see Photograph 6).

Notice in Photograph 7, that both inside and outside cylinders look the same. There are no screws showing.

That is because they are concealed by a cover plate. To remove the cover plate, put a screw driver at the bottom of the keyway and pry out as demonstrated in Photograph 8. The cover plate will pop out and reveal the screws (see Photograph 9).

Another nice feature of this lock is the exclusive wood frame reinforcer which protects the wood jamb against kick-in attacks. The reinforcer is concealed under the strike and is anchored to the jamb by two 3" (76mm) screws. There is also hardened steel balls supplied which protect the mounting screws from a drill attack.

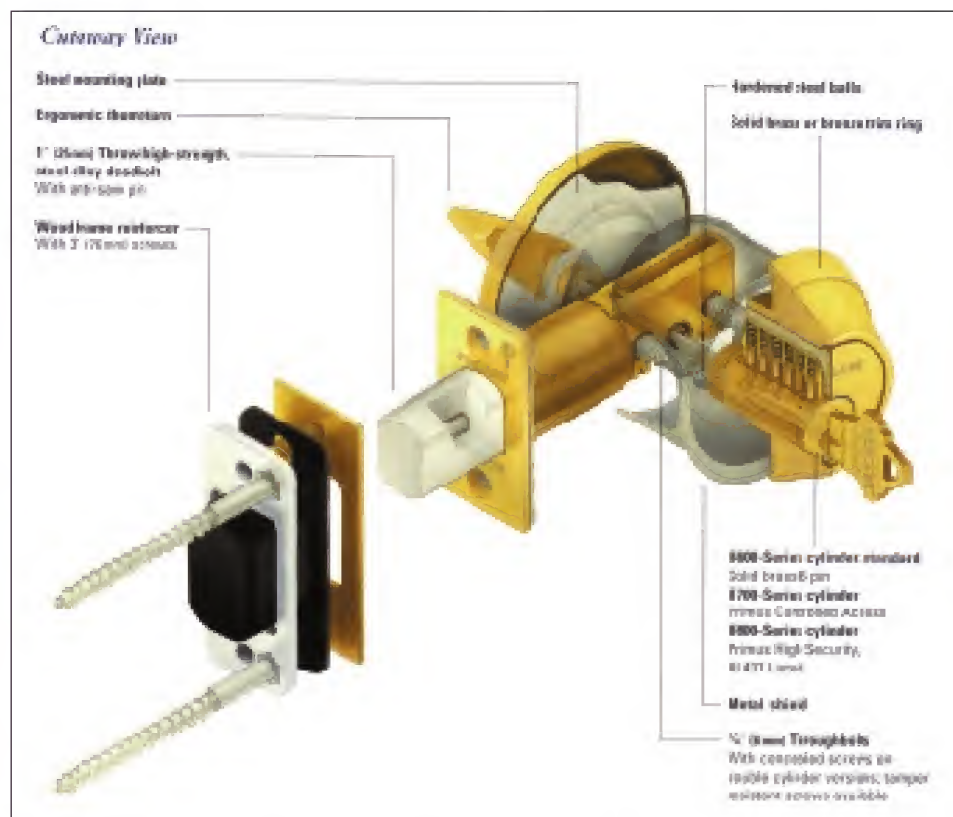
Door Handing

All Schlage locks are reversible. Hand information in necessary to ensure proper finish of latchbolt and strike for locks ordered that are to be installed on reverse bevel doors. Illustration B, shows the difference in the right and left hand and bevel and reverse bevel.

Schlage's B 600/700/800-Series locks are quite nice. If you would like more information call Schlage at: (719) 264-5300.

Point to Ponder

An error is not a mistake unless you refuse to do something about it. **TLN**



B. The difference in the right and left hand and bevel and reverse bevel.

Securex Americas and the UL Test

SecureX Americas arrived from the great White North (Canada, eh) at the UL testing facilities, about to endure its first UL testing on its TL15 and TL30 safes (see *Photo-graph 1*). Having done much research on the design of safes, consulted all the "experts" and called the Psychic Friends one last time, it was show down time. It was just SecureX members, the UL testers, our TL15 and TL30 safes and all the antacid we could carry!



by
Barry A. Felsher

Having taken exact measurements of the boltwork, including the relockers, the UL team began a 30 minute drill attack on the TL30 mechanism. Hooking up their magnetic drill press to the 3" thick door, they began to drill through the steel plate and concrete. The drill press held until they encountered armored louvers welded at 45 degree angles throughout the door. Perhaps my prayers the night before had paid off. The magnetic drill press was not holding. They changed to a brand new one, thinking the first was defective. No luck, they were going to have to free-hand it.

Alternating between pounding the louvers down and drilling, they began to



1. SecureX was about to endure its first UL testing on its TL15 and TL30 safes.



2. With glass plate protection, an additional 1/2" thick lock bolt protector to stop lockbolt punching, and one more relocker to neutralize, test number one was soon over!



3. Using chisels, fire axes and sledge hammers to peel the outer skin downwards.

make progress to the 1/2" hardened steel plate. This steel plate, new to the industry, has a higher psi than manganese. One of the testers commented that he had never seen a hard plate do this before, as he removed a mushroomed 3/8" drill bit — one of many to be used that day.

With glass plate protection, an additional 1/2" thick lock bolt protector to stop lockbolt punching, and one more relocker to neutralize (see Photograph 2), test number one was soon over! The safe passed the first phase.

The TL30/TL15 body test was next. The 3-1/2" thick body was similar in thickness to those of other manufacturers that had failed, so we had to find some way to buy more time.

The testers, using a Milwaukee circular saw with a carbide blade, cut a square in the body of the safe. They then proceeded to use chisels, fire axes and sledge hammers to peel the outer skin downwards (see Photograph 3). The Z-brackets which were welded closely together on the external and internal plates anchored them deep inside the body; this slowed down the peeling attack.

With time and a few more hits though, the concrete was exposed. I won't lie, I was nervous. Our concrete supplier swore it was 11,000 psi and we had added a large amount of steel fiber to the recipe. Would it be able to withstand the large pick and fire axes that now were being wielded at it mercilessly? These guys attacked the concrete as if their lives depended on it — we were fearfully impressed.

The clock was counting down. They had enough of an opening to put in a carbide hole saw, but not enough time to make any hole whatsoever. Test number

two was over! The safe passed the second phase.

There was still at least one additional attack to go — or more, if the testers were unsure of the safe. The dreaded door attack consisted of making a 6-square inch or equivalent size hole through the door (see Photograph 4). They had 30 minutes of net working time, to do this. The net working time doesn't sound very impressive, until you understand the way UL calculates the testing time.

With two stop watches the supervising engineer, John Savickas begins the clock only when the testers are working on the safe. This doesn't mean setting up the tools, attaching the drills or inspecting and conferring. Only as the destructive attack is taking place does the clock start. Often this will go on for mere seconds at a time and then stop again. The 30-minute drill attack took two professionals over 2-1/2 hours, including endless equipment changes and consultations. This obviously represents the most experienced people there are, under ideal conditions (who don't have to worry about waking the neighbors or burglar alarms).

On to the door attack. At this point everyone was well fed and rested. Following the morning's body attack, the UL testers approached the safe with new vigor. They began by cutting a large square using the carbide circular saw. Due to the thickness of the steel plate they were unable to peel it down and had to work hard to remove it. The Z-brackets once again added more difficulty to this task.

Next they had to remove the



4. The dreaded door attack consisted of making a 6-square inch or equivalent size hole through the door.

concrete. The steel fibers kept the concrete from falling apart and made it hard to remove. In addition, the concrete was anchored within the steel louvers, which to the admiration of one of the UL testers, was the perfect dimension and spacing to be effective. If done any other way it could have made their job easier. Once the concrete was out they began to use hand grinders and circular saws to individually cut and remove each louver.

As the clock counted down, nearing 30 minutes, the pace became frantic, as they desperately tried to cut the 1/2" thick hardened steel plate. No way. The clock counted down and congratulations were in order! I got the distinct impression that they were surprised that a first-timer through the UL testing laboratory had passed, and commented that SecureX had done its homework and prepared properly.

A good safe doesn't need a UL label to say that it's good, but having watched the testing first-hand I am convinced that having a UL label is important. It means you adhere to a very high standard — something that helps the end-user rest easier.

SecureX Americas with offices in the USA and Canada, manufactures a full line of 50+ models of safes, including C-rate composites, fire safes, depositories, floor and under-the-counter safes, and now, UL listed TL15 and TL30 safes.

For information on SecureX Americas call: 1-800-813-8462/(514) 341-0002.

TNL



TEST DRIVE!

An easy-to-install alternative to smart-card access systems is being marketed by a company called magiCorp, it's called Smart-Dot (also known as abiliKey). The Smart-Dot system consists of an extremely compact polymer turret "key" about the diameter of a dime, a corresponding contact module reader and a controller/programming module. The Smart-Dot actuates an electric strike assembly, an electromagnetic lock or other low-voltage device whenever pressed onto the hollow of the contact module. Each Smart-Dot contains a computer chip with a unique, factory-preset electronic code. The user inserts the key into a Contact Module (which is a reader), an electronic signal is instantly transmitted to the control panel and access is allowed.

Smart-Dot systems are available with a Wiegand reader interface, and can therefore also be readily integrated with most existing security systems.

Each Smart-Dot key is factory programmed with one of 3 trillion different locking combinations, and can be incrementally reprogrammed with additional user data at any time. One programming feature is the ability to incorporate differing levels of activation, permitting one Smart-Dot key to provide access to all rooms in a building, while another opens only first-floor doors.

From an electrical point of view, the Smart-Dot access system functions much like a programmable smart card, but with several major advantages. Like a smart card, the Smart-Dot itself requires no batteries, and has a life-span of many hundreds of thousands of activation cycles. But a Smart-Dot contact module's cavity is sealed against dirt and moisture, unlike the reader slots of many cards.



FEATURES:

Functions like a smart card system; key module requires no batteries; the Smart-Dot offers adjustable door unlock; the ability to program up to 20 Smart-Dots; the ability for deletion in the event of a lost or stolen Smart-Dot; a maximum installation distance of 15 feet between contact module and control box is standard; output to an alarm system or other device that could monitor usage; each Smart-Dot can be programmed into multiple units at multiple locations; a LED indicator at the contact module which indicates when the Smart-Dot has been recognized and the door has been released.

INSTALLATION:

The control box should be located in a convenient place for the customer. They will need to access the control box to add and delete Smart-Dot keys as needed. The control box must be within 15 feet of the contact module. There is an optional long distance adapter if needed.

Locate the mounting position for the contact module of the exterior side of the door frame. Careful consideration should be given to the height and location of the contact module.

Feed the control cable from the contact module to the control box.

Install an electric door strike or electromagnetic lock and power supply on door. Run the wires from the electric door release to the power supply. The appropriate relay contacts on the control panel should be wired in series with the power supply and electric door

Smart-Dot by MagiCorp

release. Wire power supply to the control panel.

PROGRAMMING:

On the control panel, press the function switch one time. The LED will begin blinking green. Place a Smart-Dot into the contact module. The LED will stop blinking and remain green for several seconds indicating that the key was successfully programmed into memory.

DELETING Smart-Dot KEYS:

On the control panel, press the function switch two times. The LED will turn red and blink. Insert a Smart-Dot into the contact module until the LED remains red, indicating that the key has been removed from memory.

CONCLUSION:

This is an interesting product. For small moderate traffic locations, I think it is an ideal alternative to the more expensive card access systems. The design is compact and unobtrusive and I like the idea of being able to carry the Smart-Dot access key on my key ring for easy access. The Smart-Dot system is definitely worth looking into if you are in the need for an small inexpensive access control device.

PRICE:

The Smart-Dot is priced at \$6.63 each. The corresponding contact module has a net price of \$9.97. A Wiegand-compatible controller unit is priced at \$66.95 net. Smart-Dot keys units are available with or without key-fob bases and may be ordered in numerous colors for control-coding purposes.

For further information about Smart-Dot systems call: (888) 872-8708. Fax: (860) 870-6905. **TNL**

IN SUMMARY:

DESCRIPTION: The Smart-Dot system is a low cost key fob alternative to traditional card access systems.

PRICE: Including Smart-Dot key, contact module and control panel, \$83.55.

TEST DRIVE RESULTS: Anyone interested in a small low cost access control system should first look at the Smart-Dot.